one before its attempted administration. Fortunately, on the other hand, in such cases, in which ether is given with only temporary benefit, early in the second stage of labor, it is often deemed advisable to withhold it until the patient regains more or less consciousness. The outcries of the patient then for more ether, and the changes of position in bed she frequently makes, notwithstanding the severe restraint imposed upon her by the attendants, serve to increase the power of the pains and to bring to happy termination the second stage of labor.

Besides the occurrence of uterine inertia from long-continued position of the patient in labor, other disturbances are liable to arise. The effects of the blood pressure, and the gravitating of fluids toward the left uterine appendages and the peri-uterine structures, when the patient occupies for a long time the left lateral posture, should not be overlooked. Such untoward effects are particularly apt to follow in cases of those who suffer from cardiac affections, from disease of the lungs, bronchial tubes, kidneys, from general or partial œdema, and from deficient circulation. As already stated, parturition is not a mechanical but a physiological function, dependent upon a force having its origin in the nerves distributed to the uterine tissue and to the system generally. Whatever, therefore, tends to exhaust the general system, interferes with the normal action of the parts, and disturbs the proper function of the uterine tissue. When such disturbances are imparted to structures outside of the uterine walls, they are not easily overcome, but leave their impress more or less indefinitely on the parts involved. The great impressibility—as well as sensibility—which women acquire even in the early stage of pregnancy, is well shown by the development of that peculiar appearance denominated mother's marks which sometimes occur on the cutaneous surface of the child. It is not only in the early stages of pregnancy, but in every stage of that condition, and even for some time after delivery, that this highly sensitive condition obtains, leaving its impressibility more or less permanently not only on the fœtus, but also on her own tissues adjacent to the uterine structures.

Among the puerperal lesions which may result from the lateral posture too long retained are affections of the bladder. The prolonged pressure of some portion of the fœtus on the sensitive bladder arrests to a considerable degree the normal action of that viscus. It thus weakens its integrity—causes inflammation of the mucous surface. The inflammation in the bladder is prone to extend backward into the ureter. The ureter itself, on one or both sides, taking on inflammatory processes becomes distended with unhealthy urine. This may lead to rupture into the pelvic tissue, and thus give rise to sloughing or to the formation of abscess. I have notes of the autopsy in the case of Mrs. E., who died during the third week after delivery. The death occurred after second confinement. The bladder throughout its entire surface was tumefied, red, and covered with dark, purulent fluid. The pelvis contained a quantity of semi-purulent exudation having the odor of urine. The left ureter was abnormally distended, it was inflamed and was found to have undergone rupture at a point three and one-quarter inches from the base of the bladder. The ureter on the right side, though somewhat inflamed from the contact with morbid urine, was not greatly distended. The history of the case showed that the patient was in labor some thirty-six hours, and that during the last twenty-three hours she had occupied for the most part the left lateral posture. The pelvis was well formed and of normal dimensions. The child was not large. It was born alive and did well. The cause of the delay in the delivery appeared to be owing to inertia into which the uterus had partially lapsed quite early in the second stage of labor. The patient had suffered from chronic cystitis and from marked anteversion of the uterus. Recto-vaginal and vesico-vaginal fistulæ are lesions which now and then occur and which are largely the result of childbirth. Emmet mentions two hundred and two cases that were admitted to the Women's Hospital. One hundred and seventy-one of the cases were caused by child-birth. He says the average duration of the labor completed from rupture of the membranes was 58.69 hours. On another table he says 46.19 per cent. of the cases were delivered by forceps, and that the average duration of labor was 68.55 hours. Emmet does not coincide in the popular belief that instrumental delivery is the cause of fistulæ. He rather attributes their occurrence to retardation in the progress of labor, induced by negligence to empty the bladder. Though he recognizes over-distension of the bladder as a factor in the production of fistulæ, he does not appear to be wholly certain as to that condition of the patient being the final cause, for he says it is not improbable, since the averaged time is so long before the separation of the sloughs that the additional force in many cases necessary to effect the delivery may be the exciting cause of the inflammation. In six cases of vesico-vaginal fistulæ whose histories I obtained, the additional factor could not be attributed to force necessary to effect delivery. It was clearly due to the position of the patient too long retained. In three of the cases the position was the left lateral, in two the dorsal; in one was the right lateral which the patient persisted in retaining for some forty-four hours.

Among the other inflammatory conditions which follow confinement are those of the uterine appendages. Sometimes we have salpingitis on one or both sides, but often more severe on one side. Sometimes the morbid process comes from

the escape of blood through the fimbriated extremity of the tube into the pelvic cavity. Sometimes we have following confinement an hæmatic tumor or cyst, and occasionally, if not often, hæmatosalpinx. All these lesions or morbid processes, whatever be their predisposing causes, are influenced more or less by posture of the patient.

Hæmorrhage from the lungs and from other organs, and from the vascular tissues, is greatly influenced by position. In the treatment and in the prevention of such symptoms position of the patient and of the parts must always be a factor for consideration. In the management of hæmorrhage and accidents peculiar to the puerperal state position of the patient becomes of still more consequence. This is rendered so not only on account of the extreme sensitiveness of the organs and the system generally but also on account of the development of that nervous function and the exhausting exercise of it necessary for production and accomplishment of parturition. Another condition sometimes following labor is subinvolution of the uterus. The cause of this condition has often been ascribed to laceration of the cervix. Cases of subinvolution now and then occur in which no appreciable laceration can be found to have taken place. In such cases in the absence of a history of an injury having been received it is usual to consider the cause to be want of tone in the pelvic venous circulation.

I have the history of two cases of subinvolution of the uterus, in which there was no laceration of the cervix nor of the perineum. Nor was there any reason to suspect that there existed in either case a perverted condition of the system generally. Neither patient had sustained injury immediately preceding or during parturition. In one case uterine dyskinesia was also a troublesome symptom. In the other case, though the subinvolution was not so pronounced, there was for a long time inability to walk (uterine lameness). There was an increase of the tendon reflex, and there were areas of much sensitiveness in the vicinity of the dorsal and lumbar vertebræ. The first patient was in labor forty-nine hours, but was delivered without instruments. She occupied for the most part the left lateral posture. The second patient was in labor fifty-three hours. She was delivered also without instrumental interference. She occupied almost continuously during labor the dorsal posture.

In conclusion I would say that I have chosen this subject for consideration not because I am now prepared to offer any special rules for guidance as to the position of the patient in labor, but from a conviction, deepening more and more by experience, that posture in some, if not in a large class of cases, is an important factor in the production of derangement of uterine force and also in that of pelvic disturbance. Such perversion in the function of the uterine tissue and adjacent structures is liable to be looked upon as being the result of some possible defect in the particular treatment in which all due and proper care may have been exercised, and not as the result of some other element in the management of the case for the reason of which it has not occurred to the medical attendant to make inquiries.

(For discussion see Society Proceedings.)

MIGRAINE AND FUNCTIONAL HEADACHES FROM EYE STRAIN.

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Writers on nervous diseases, as a rule, devote considerable attention to migraine, its etiology and clinical phases. It is generally conceded that it is due to some special sources of irritation, whether in the stomach, uterus, eye or elsewhere in the system. The eye is often honored as a causative factor with the appropriate heading of "Ophthalmic Migraine." Physicians and scientists have recorded minutely and accurately, attacks occuring in their own persons. Among these, Wollaston stands preëminent as the first who drew general attention to one phase of this functional disturbance, viz.: temporary hemianopsia. A dissertation on the "Semi-Decussation of the Optic Nerves" was published by him in the "Philosophical Transactions" a few years prior to his death, which took place in 1806, from organic disease of the brain. In this paper he stoutly affirmed his belief in the semi-decussation of the nerves at the optic chiasm. He arrived at this conclusion by a study of his seizures of temporary homonymous hemianopsia. His experience led him to regard temporary hemianopsia as common in migraine seizures. Sir John Herschel, Sir Charles Wheatstone and Dr. Herbert Airy have recorded their special phases of the disease.

Parry, to whom credit is due for first having drawn attention to that complex disarrangement of several organs, which we now designate as Basedow's or Graves' disease. He described the eye symptoms occuring in his own person during migraine attacks as incomplete scotomata, lasting from twenty to thirty minutes. We find various names used to designate these attacks: migraine, megrim, sick or bilious headaches, hemicrania.

The influence of heredity is marked, and we find a neurotic element in many of the cases. Women are supposed to suffer much more frequently than men. Eulenburg states that the proportion is five to one. Three to two would be more in keeping with my record of cases. We find that migraine is likely to last from the fifteenth to the fiftieth year—the active period of life; that young children and quite old may suffer with it. In the majority of these attacks the pain is apt to begin

on one side of the forehead or temple, more often the left, involving the ophthalmic division of the fifth nerve with its branches, and at times the occipital and its branches, but in the severe seizures the pain is not confined to one side but includes both. In some the first manifestation is dizziness; in others the eye symptoms precede the head and stomach. After a variable interval of pain, the eyes become affected—perhaps a temporary blindness, half blindness or blur of objects, scotomata, light phenomena, which assumes in some cases fantastic shapes, great intolerance of light and noise; eyes become bloodshot and painful, especially when the eyes move in their sockets. This lasts from fifteen minutes to half an hour; then the stomach manifestations are in order; this varies from mere nausea to the most violent retchings and vomiting. This is usually the turning point of the attack, and if the patient can only get asleep, he awakens free from pain, but weak. The duration of an attack may be from a few hours to two days.

The subdivision of migraine into anæmic and congestive types as a classification has something to recommend it, but in practice the exceptions outnumber those that follow the rule. Even in the same individual the attacks vary in duration and severity, sometimes being so slight that all ordinary routine work is done without much disturbance, while again the head, eye and stomach symptoms are so severe that life is not worth living. The patient lies in bed utterly prostrated, pale, drawn countenance, racked with pain and vomiting, unable to bear the slightest noise, while light is simply intolerable—a picture of misery. Liveing's appellation, "nerve storm," becomes very appropriate.

These nerve storms vary in frequency from only a few in the course of a year to one or two in a week. This difference we attribute to the health of the patient, and in the main we are correct. At the same time, if we question closely such a patient, we find that headaches are of very frequent occurrence, oft-times daily; they have become so common that they accept them philosophically. The pains extend across the brows, temples, back of head and even descending down the cervical vertebræ. Close work is certain to produce a headache; so is shopping, watching a play at the theatre, or looking out of a car window while traveling, and if the headache is not an immediate sequence it is likely to come on the next morning. I have known patients who could not look at a floor of square marble tiles or patterns of wall paper without a headache, even at times amounting to migraine.

Many of these sufferers are nervous and irritable, especially if the health is below par. Trifles upset them, and not a few pass into an neurasthenic condition. Stevens, in his book on "Functional Nervous Diseases," gives it as his experience that the eyes are the most prolific source of nervous disturbances, and more frequently than any other conditions contribute a neuropathic tendency.

As to the pathology—the views are as numerous as the observers.

Du Bois Reymond, in 1860, arguing from his own personal manifestations of migraine, held that there is a tetanic condition of the vessels of the affected side, with involvement of the cervical sympathetic. Mollendorf maintains that there is a dilatation of the vessels due to paralysis. Liveing, that there is a nerve storm passing through the centres at certain intervals constituting an attack of migraine. Latham, that owing to a spasm of the vaso-motor nerves there is primarily a condition of anæmia of the parts of the brain affected.

In all probability each of the views expressed describes one stage and only so much: that the hemianopsia scotomata and other ocular phenomena result from anæmia of the controlling cerebral centres, and are due to the contraction of the capillaries, brought about by irritation of the sympathetic vaso-motor nerves. This stage is but temporary, not exceeding an hour at most, and is followed by a stasis or congestion, causing the pain within the brain, followed by stomach and other disturbances. There are no two eyes exactly alike—we unconsciously use the better eye more than its fellow, hence the one-sided pain in mild attacks.

Binocular vision is a very complex performance, demanding for its accomplishment the harmonious coöperation of several cerebral centers—cranial nerves and the sympathetic system. The 2d, 3d, 4th, and 6th, and perhaps in a measure the 5th cranial nerves, as well as the sympathetic, are called into play. One or more parts of this system may be defective, thereby throwing extra strain on the others. The refraction of the eyes is usually at fault, with secondary involvement of the muscles—ciliary and external ocular muscles. A common illustration of this is seen in convergent squint, owing to a deficient refraction of the eyes—it becomes easier to sacrifice binocular vision and work with one eye. The result is that the external rectus of squinting eye becomes weak, while the contracted internus is over developed.

To the memory of Donders mankind owes an undying debt for his classic work. He placed the refractive errors of the human eye on a scientific basis. To give some idea of the misconceptions that were extant with regard to the refractive errors I will quote Mackenzie, a great authority in his day and that not fifty years ago, while writing about presbyopia, or farsight. He states when it came on suddenly much under the age of forty it was due to *some disease* within or behind the eyes. It was even observed in chil-

dren; in all such cases evacuating remedies were found useful. Leeches to the temples; blisters behind the ears and the use of purgatives. These, he naively remarks, generally cured. He quotes the case of a boy under Mr. Ware's care, whom the master at school frequently whipped on account of defective sight. Mr. Ware supplemented the school master's counter-irritation by evacuating remedies, and effected a cure. I have no hesitation in saying that refraction errors of high degree have great influence on the formation of the character. The young myope seeks companionship in his books—grows introspective—lives in an ideal or unreal world of his own creation; becomes bashful, diffident, and takes no part in the sports of his companions, so that his physique suffers. The hyperope with high degree of error learns but slowly on account of the great strain to see—books are to him distasteful—may be classed as a dullard by his parents and teachers—often censured unjustly, when really he has entered the race heavily handicapped.

Donders, in his classic work, states distinctly that the emmetropic, or normal eye, is one with a small amount of error, which must not exceed $\frac{1}{60}$ of hyperopia; while under astigmatism he writes, "so long as astigmatism does not essentially diminish the acuteness of vision, we call it normal, and if it amounts to $\frac{1}{60}$ or more it is abnormal."

Donders published his book over twenty-seven years ago and his observations were made in Holland. With regard to our country, at the present time, the errors which he accepted and called normal are too great to pass uncorrected, especially if the patient suffers from headache or other nervous disturbance. The hurry and excitement incidental to life, in a large city, combined with our stimulating climate, tend to exhaust the system much sooner than abroad.

Every organ has its limitations of work and endurance, and the human eye is no exception to this rule. Further, a normal eye is the exception, and when we impose or exact of our eyes an amount of work that calls for very great strain to accomplish, pain and nervous disturbances are most likely to develop. I do not advocate that all refractive errors of the human eye should be corrected, but if we have reason to suppose that such errors are prejudicial to the comfort and health of a patient, it becomes our duty to have that strain removed by suitable glasses. When vision is poor and the daily avocation demands good sight, correction is in order as a matter of course. With the aid furnished satisfactory work can be accomplished, and the eyes used within the ordinary physical limitations, which we must all learn for ourselves. As a rule it is not such cases that perplex a physician, for if there is any oblivious defect of sight, with pain and blur following the use of eyes, the patient may know of the defect and mention the fact, but this does not necessarily follow.

The difficulty is with the masked cases of refractive error, when the vision is excellent and a fair amount of work done without much apparent discomfort. The majority of patients claim that their vision is excellent, when, in fact, ofttimes it is quite indifferent. Questions as to the eye strains are stoutly denied; not through any wrong motive, but they have such abiding faith in the excellence of their eyes; and further, few persons study themselves carefully. Any headaches or migraine attacks are promptly attributed to some cause, dyspepsia, liver, or neuralgia, and then they have always suffered, at least for many years, that one or the other of the parents, suffered in a similar way, and how can they expect to escape.

I well remember the case of a lady ten years ago who had long and frequently suffered from migraine, who was cured by wearing glasses. When I first suggested to her that her eyes were at fault she remarked that it was impossible, for her vision was excellent and none of the many physicians whom she had consulted, both at home and abroad, never even mentioned such a thing.

In very many of these cases distant vision is good and if they could be ranchmen, sailors, or lead a pastoral life, there would be but little trouble worth mentioning.

In examining patients who suffer from functional headache and migraine we should resort always, when it is possible, to mydriatics, so as to put the ciliary muscle at complete rest. There are quite a number to select from—sulph. atropiæ is most generally used, but where time is of importance we can get satisfactory results from a combination of homatropine and cocaine—two per cent. to four per cent. solution; the effects pass off in about twenty-four hours. No one is justified in excluding the eyes, as a cause, until a thorough examination is made, as to refractive errors, under complete ciliary paralysis. I have frequently found that correcting 0.25 D. of astigmatism has given complete relief.

In testing eyes the accepted standard of $\frac{20}{20}$ vision is only a guide, for with young patients $\frac{20}{15}$-$\frac{20}{10}$ is not very exceptional. So that a glass in such a case, that gives a vision of only $\frac{20}{25}$, is not the correction and we should look further. If we find that a convex glass appears to correct—try and see if a combination of a weaker convex with a weaker cylinder does not do equally as well, if not better. To any one who has much experience in this line, it is often surprising to note the various combinations which appear to give equally good vision, viz.: $\frac{20}{20}$ in a given case, and often considerable care must be exercised in deciding which gives the best results on the astigmatic chart and test type card.

Always fully correct the astigmatic error, but

in respect to the ametropia which may exist, too many factors have to be considered to discuss the subject in this paper. Test ocular muscles before and during the accommodative paralysis. It will be found that the results vary very much at different examinations. I am of the opinion that the eye strain makes faulty ocular muscles and generally, the ametropia satisfactorily corrected, the muscles will not be a disturbing factor. Hypermetropic astigmatism furnishes the greatest number of cases for the simple reason that myopia is rare, comparatively speaking, when we consider the whole population.

Correct for distance and near work; insist on the continuous wearing of the glasses, but here we strike a snag, for many, especially women, will not wear glasses out of doors. They would rather take antipyrin, or some similar drug, when they have migraine.

In conclusion—from an extended experience of years, with hundreds of cases, I am forced by experience to regard eye strain as the cause in over seventy-five per cent. of all the cases of functional headache and migraine.

THE INFLUENCE OF GERMAN UNIVERSITIES UPON OUR PROFESSION.

Read before the American Academy of Medicine, at its Fourteenth Annual Meeting at Philadelphia, December 4, 1890.

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From the minutes of the Council, I extract the following authority for the selection of my subject, and its presentation at this meeting of the Academy:

> In accordance with the leading objects of our organization, the education of the physician, both preliminary and technical, the relations of the profession in this country to that of other countries, and the elevation of the literary, scientific and social standing of the Profession, are especially appropriate subjects.

In view of the fact that the constitution was altered at the last annual meeting so as "to admit, in addition to those possessing the degrees of A.B. and A.M., those who can present evidences of preparatory liberal education equivalent to the same"—the subject proposed in the following paper is of vital importance at this meeting of the Academy.

INFLUENCE OF GERMAN UNIVERSITIES UPON THE MEDICAL PROFESSION.

1. What is a University?

It is one thing in America, another in England, and something else in Germany. Hence the importance of a clear definition. The University of London has no teachers, no scholars, no buildings, except a room in Burlington House, no libraries, no laboratories, and yet it has a brilliant staff of Professors in the Scientific and Medical Department. It is simply the Napoleonic University of France without the principle of teaching. Why not, therefore, have a University without teachers, in this age of printing, of many books on every subject? Because, the mind, the voice, the eye of the living instructor is as necessary to-day as in the days of the Athenian Agora or Academia, with Plato, Aristotle, Socrates and their pupils In Germany by these means Hegel in philosophy, Dorner in theology, Hoffman in chemistry and von Virchow in physiology, have been equally successful.

Hence a University is a body of instructors, teaching the highest knowledge, of the most worth to men, dealing with their dearest interests, appealing to their finest powers and noblest feelings. To aid them in this blessed work let the University prescribe certain courses and what rewards shall follow a complete and thorough training; and not for these alone, but let them arrange for those who thirst for knowledge, and earnestly desire the best sources, who should be welcomed to lectures suited to their needs, just as hungry souls pass through church doors always open to satisfy their wants. Therefore Universities must teach, must vivify knowledge, by appeals to the discursive reason and the creative imagination. But they must do more. Among the services they render when rightly conducted, is the prosecution of scientific research into facts imperfectly examined. True teachers are always progressive and not content with imparting the conclusions of others. They are investigators for testing the observations of their predecessors, while reaching their own conclusions. In the natural sciences, they will observe phenomena, collect and classify observations, draw inferences and force nature to give up her secrets by experiments. Among the greatest teachers in science a large number have been and are now, discoverers.

In such an institution, famed for its teachers and its original researches, a young student in medicine escapes exclusiveness, because the methods of one science are corrected by those of another. In such an atmosphere, theologians and mathematicians are not intolerant of the votaries of natural science. The student sees a host of men, eminent in genius and industry, who enlarge his horizon by bearing her torch into abstruse paths of knowledge, to masterpieces of thought and feeling which bear fruit in his own mind through life. Hence the Catholicity of his views, the elevation of his feelings and the success of his pursuits.

2. But what claims have the German Universities on our peculiar attention to-day?

Montesquieu, in his "Spirit of the Laws," declared that the English Constitution is found in the forests of Germany, which is abundantly confirmed by Tacitus, and in later days by Palgrave Kemble and Sir Henry Maine. English customs

and laws migrated with the Pilgrims to America. The Germanic System of common fields was revived as Commons or Town Lands in New England. The Saxon Hege, Warden of the Hedge, was the pound keeper of the United States. In the Mayflower's cabin was representative government, and in the Pilgrim's soul there was reverence for law, to be maintained in a legalized, organized town, with a church for God's worship and a seminary of learning for man's welfare, on which rested the institutions of a new world. Hence Harvard and Yale are the legitimate offspring of Teutonic ideas and German ideals—the "Alma Mater" of a numerous family.

German Universities are controlled by the ideas that *national unity* depends on *national culture*, that the *powers* that be are ordained of God, and that *rulers are to be obeyed*, if they consecrate their *power* to the *welfare of the whole people*. The instruction is by means of lectures, and the discussions are conducted by the professors. With the highest instruction in theory are combined laboratories, clinics, and the best apparatus for observation and experiment, to secure practical instruction. Diligence and scholarship are rewarded by degrees which the student must have before he can graduate or enter a profession. *Our* colleges are stepping-stones, like their gymnasia, to a university. We have no institution which the Germans will recognize as a university, and they have none which an intelligent American would recognize as a college. Their high schools, with a six years' course, furnish a general education, not a liberal one, and are designed to prepare students for business life. The school for liberal education is the *Gymnasium*, with a nine years' course, which pupils begin at nine years of age. Linguistic and historical studies are the peculiar principle of the gymnasium, and as the Minister of Education, von Gosler, officially declared in 1882, "are designed to prepare for independent study at the University."

The Real Schools, the rivals of the gymnasia, have received their inspiration from the people, and were promoted by progress in natural science, industrial pursuits, and in realism, instead of idealism. They emphasized modern languages, history, mathematics and natural science. The *real* was to be secured by the *Real* Schools. But German scholars are not prepared to sever scholarship from the ancient classics, to take in their place the modern languages, or translations of the ancient—and the German Government prefers the gymnasium, for every position in its gift is accessible to its graduates. German physicians are not ready for such a change, for out of 163 Medical Societies only three gave their unqualified consent for the admission of students in the Real School to the University Medical Department. There are serious complaints by the German Government respecting the efficiency of their medical students, and fear lest the change in the standard of admission to the University Medical Department might lower the standard of scholarship. They favor an increase of the study of medicine from four to five years, to secure better preparation for the faculty.

The testimony of that eminent chemist, Prof. A. W. Hoffmann, rector of the University of Berlin, is very important to all liberally educated physicians. He is certainly one of the ablest instructors in that great University, and means what he says, viz.: "That all efforts to find a substitute for the study of the ancient classics, whether in the modern languages, mathematics, or natural sciences, have thus far proved a failure. How often have I heard young men prepared in Real Schools deeply regret that they had not enjoyed the training of a gymnasium. The ideality of academical study, the unselfish devotion to science as science, the free exercise of thought, the condition and result of this devotion recede in proportion as the classic basis, as training for the university, is withdrawn. I have had much occasion to speak of this matter with friends devoted to physics and mathematics, and with scarcely an exception I found they had the same conviction." These are strong words, and merit careful consideration. Similar testimony, as to the value of a classical education, has been given by Liebig, the father of agricultural chemistry, Wolff, Henneberg, Knap, Nobbe, Stohmann, Kühn and others, all of whom are well-known chemists and discoverers in Germany.

3. Does the History of Medicine confirm these Claims?

Are we members of a learned profession? Should we rank with lawyers and theologians on University Catalogues? Have we a scientific profession?

These are important questions in America as well as in Germany. Let us see. Homer mentions two physicians, Machaon and Podalims, skilful in stanching wounds and relieving pain. The story of Æsculapius proves that as far back as legendary history, men made disease and the healing art a special study, and lived by the practice of their craft; but their observations and theories were worth little, because their philosophy was so crude. The labors of Hippocrates are constantly marred by his identification of effect with cause, restrictions placed on the dissections and undeveloped collateral science, still his work is a monument of unwearied industry and wonderful fidelity to nature. The signs of facts, for the facts themselves, or effects taken for causes, ruined every system of nosology from Hippocrates to Cullen.

There was no sound anatomy or physiology to solve the problems of the diseased system, and not until the *analytical method* of the Alexandrine School pointed to dissection and un-

locked the human frame, that true light revealed the phenomena of disease. Herophilus, their most celebrated teacher, made six hundred dissections, and acquired such distinction that the proverb remains to this day, "To contradict Herophilus is to contradict the Gospel." But the famous fire at Alexandria destroyed his researches with the Library, but not the principles which they discovered, for Philinus, his disciple, left the most important system of early medicine. Philinus urged a return to observation and clinical studies, and was surrounded by a host of observers, among whom was the celebrated Heraclides of Tarentum, who first introduced opium into practice.

So far, scientific medicine is confined to a University, Alexandria, with its literary treasures and learned men. Let us pass from the East to the West, from Egypt to Italy. Pliny assures us that the Roman people had been without a physician for six hundred years. In some things the world is not wiser now than at that period. Then people resorted to certain temples, even in the severest epidemics, as now to the shrine of St. Vitus, where the "Faith Cure" had its most numerous disciples as well as victims. St. Ossifyga cared for the growth of bones at Rome, just as St. Ursula now cares for them when dead in the Church of the 11,000 Virgins at Cologne.

In Rome, and at this epoch, appeared the elder Pliny, who collected in his "Historia Mundi," all the systems from Hippocrates to his own, and has left in his history many original views and reflections, as evidence of the profound mind of a great naturalist. From Pliny to Galen, the inquiries multiplied exceedingly, because Galen revived the principles of the great physician of Coos, and held undisputed sway in medical matters till the sixteenth century. Devoted to anatomy and physiology, especially the former, his authority became as infallible in medicine as that of Aristotle in philosophy. With Galen, early medicine lost its greatness, and with the downfall of the Roman Empire it retrograded likewise, but during the history of that Empire, so far as progress was made in the principles and practice of our art, it was on a *scientific* basis. Æsculapius was enthroned at Rome, and not at Canossa.

The age of Dante was the period of the renaissance, when science was divorced from superstition and charlatanism. The first modern dissection of the human subject was made by Mondini di Luzzi, towards the close of the sixteenth century, when the tone of the European mind influenced art as well as medicine, but the public authorities censured Mondini, and dissections ceased. In the sixteenth century, Vesalius resumed them, and laid the foundation of modern anatomy. The purity of his intentions and his noble views removed popular prejudice, which enabled Ambrose Paré, first to turn to practical use the labors of his predecessors, and as surgeon to several European sovereigns, by systematizing the researches of his predecessors, to lay foundations for the structure reared by John Hunter, Dupuytren, Abernethy and Sir Astley Cooper. During the eighteenth and nineteenth centuries such stars of the first magnitude as Morgagni and Scarpa in Italy; Haller, Boerhaave, Heister and Soemmering in Germany; Dupuytren and the illustrious Bichat in France; Cullen and the Hunters in England —all eminent physicians and surgeons, continue the work of scientific research in medicine, and science based on facts and not on theoretic principles, in a field of enquiry commensurate with the three physical kingdoms of nature.

Surely, the Germans have not erred in their estimate of a classical and scientific training for a physician up to the nineteenth century, if the history of our profession means anything in the development of the race.

What shall I say of *our* century, now drawing to a close? How the labors of our predecessors pale before the wonders of the nineteenth century! Physical examinations, chemical tests, microscopical histology, anæsthetics in surgery, have certainly elevated medicine to a science, and its practitioners to the front rank of her votaries, entitled to the respect and gratitude of all enlightened men. Every tissue of the body is under the microscope, all living organisms are the products of elementary cells, so that every difference of structure implies a difference of function. Thus we mount from the simple cells to the marvelous structure, man, the paragon of animals, the beauty of the world. Under the careful studies of the German, Kolliker, the liver is revealed as a complex and beautiful structure, symmetrical in design, with an arrangement of lobules, cells, nerves and blood-vessels, worthy of the warmest admiration, not simply to make bile, but to repair the waste of nerve tissue. No less the eye, when under the microscope, bears the happiest results. The discovery of the retinal expansion of the optic nerve or Jacob's membrane, has wonderfully elucidated the phenomena of vision. Those nerve fibres are specially fitted to the undulations of light. What a change in our theories of color vision! Anæsthetics have robbed surgery of all its cruelty and half its danger, extended its sphere of action, increased the proportion of recoveries after severe wounds and mutilations, and insured the safety of obstetrics. Within fifty years the operation for stone will become obsolete. Small pox is no longer a possible danger to life. Typhoid fever is rarely fatal and typhus is almost unknown, except in th wake of armies or famine. Madness is now a curable disease, and the drugs employed are less loathsome than the disease. Fluid extracts and active principles take the place of nauses powders and tinctures. The causes of disease

are more thoroughly studied and better understood. From a cold in the head to pulmonary phthisis, from lupus to cancer, Bacillus is the password, no matter what may be the "Grippe." Query. Is the Bacillus the cause or a consequence of the disease? Let that star of the first magnitude now in the zenith at Berlin so guide our wise men, now about to visit him from the East, that we may all have a quick deliverance from the scourge of mankind.

Mr. President and Fellows of the Academy, I thank you for your patient attention. May I ask for your careful consideration?

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EDUCATIONAL POSITION OF BERLIN.—There are 5,527 students in attendance upon the different faculties of the University of Berlin, which places it at the head of all the German universities. Throughout Germany there are nearly 30,000 students in attendance at twenty universities.

AMERICAN MEDICAL ASSOCIATION.

Plan of Organization for a National Medical Association.

WHEREAS, The Medical Convention, held in the city of New York, in May, 1846, have declared it expedient "for the medical profession of the United States to institute a National Medical Association;" and,

Inasmuch as an institution so conducted as to give frequent, united and emphatic expression to the views and aims of the medical profession in this country, must at all times have a beneficial influence, and supply more efficient means than have hitherto been available here for cultivating and advancing medical knowledge; for elevating the standard of medical education; for promoting the usefulness, honor, and interests of the medical profession; for enlightening and directing public opinion in regard to the duties, responsibilities, and requirements of medical men; for exciting and encouraging emulation and concert of action in the profession, and for facilitating and fostering friendly intercourse between those who are engaged in it: therefore, be it

Resolved, In behalf of the medical profession of the United States, that the members of the Medical Convention, held in Philadelphia, in May, 1847, and all others who, in pursuit of the objects above mentioned, are to unite with or succeed them, constitute a National Medical Association; and that for the organization and management of the same, they adopt the following *Regulations:*—[1]

I.—TITLE OF THE ASSOCIATION.

This institution shall be known and distinguished by the name and title of "The American Medical Association."

II.—MEMBERS.

The members of this institution shall collectively represent and have cognizance of the common interests of the medical profession in every part of the United States; and shall hold their appointment to membership either as delegates from local institutions, as members by invitation, as permanent members, or members by application.

The *Delegates* shall receive their appointment from permanently organized State medical societies, and such county and district medical societies as are recognized by representation in their respective State societies, and from the medical department of the Army and Navy of the United States, and the Marine Hospital Service of the United States.

Each delegate shall hold his appointment for one year, and until another is appointed to succeed him, and shall participate in all the business and affairs of the Association.

[1] Revised to date.

Each State, county and district medical society, entitled to representation, shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number; *Provided*, however, that the number of delegates from any particular State, Territory, county, city, or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of this Association. The Medical Staffs of the Army and Navy shall be entitled to four delegates each. The Marine Hospital Service of the United States shall be entitled to one delegate.

No individual who shall be under sentence of expulsion or suspension from any State or local medical society of which he may have been a member, or whose name shall have been, for non-payment of dues, dropped from the rolls of the same, shall be received as a delegate to this Association, or be allowed any of the privileges of a member, until he shall have been relieved from the said sentence or disability by such State or local society, or shall have paid up all arrears of membership; nor shall any person not a member and supporter of a local medical society, where such a one exists, be eligible to membership in the American Medical Association.

No one expelled from this Association shall at any time thereafter be received as a delegate or member, unless by a three-fourths vote of the members present at the meeting to which he is sent, or at which he is proposed.

Members by Invitation shall consist of practitioners of reputable standing from sections of the United States not otherwise represented at the meeting. They shall receive their appointment by invitation of the meeting, after an introduction from, and being vouched for by, at least three of the members present, or three of the absent permanent members. They shall hold their connection with the Association until the close of the annual session at which they are received; and shall be entitled to participate in all its affairs, as in the case of delegates, except the right to vote.

The *Permanent Members* shall consist of all those who have served in the capacity of delegates, and of such other members as may receive the appointment by unanimous vote, and shall continue such so long as they remain in good standing in the body from which they were sent as delegates, and comply with the requirements of the By-laws of the Association. Permanent members shall at all times be entitled to attend the meetings, and participate in the affairs of the Association, so long as they shall continue to conform to its regulations, but without the right of voting; and, when not in attendance, they shall be authorized to grant letters of introduction to reputable practitioners of medicine residing in their vicinity, who may wish to participate in the business of the meeting, as provided for members by invitation.

Members by Application shall consist of such members of the State, County and District Medical Societies entitled to representation in this Association as shall make application for admission, in writing, to the Treasurer, and accompany said application with a certificate of good standing, signed by the President and Secretary of the Society of which they are members, and the amount of the annual fee, five dollars. They shall have their names upon the roll, and have all the rights and privileges accorded to permanent members, and shall retain their membership on the same terms.

Every member elect, prior to the permanent organization of the annual meeting, or before voting on any question after the meeting has been organized, must exhibit his credentials to the proper committee, and sign these regulations, inscribing his name and address in full, specifying in what capacity he attends, and, if a delegate, the title of the institution from which he has received his appointment.

III.—MEETINGS.

The regular meetings of the Association shall be held annually. The place of meeting shall be determined, with the time of meeting for each next successive year, by vote of the Association.

IV.—OFFICERS.

The officers of the Association shall be a President, four Vice-Presidents, one Permanent and one Assistant Secretary, a Treasurer, and Librarian. They shall be nominated by a special committee of one member from each State represented at the meeting, and shall be elected by vote on a general ticket.

Each officer except the Permanent Secretary, shall hold his appointment for one year, and until another is elected to succeed him. The Permanent Secretary shall hold his appointment until removed by death, resignation, or a vote of two-thirds of the members present at a regular annual meeting.

The President and Vice-Presidents shall assume the functions of their respective offices at the beginning of the annual meeting next succeeding their election; all other officers shall enter upon their duties immediately after their election.

The President shall preside at the meetings, preserve order and decorum in debate, give a casting vote when necessary, and perform all the other duties that custom and parliamentary usage may require.

The Vice-Presidents, when called upon, shall assist the President in the performance of his duties, and during the absence, or at the request

of the President, one of them shall officiate in his place.

The Permanent Secretary shall record the minutes and authenticate the proceedings; give due notice of the time and place of each next ensuing annual meeting; notify all members of committees of their appointment, and of the duties assigned to them; hold correspondence with other permanently organized medical societies, both domestic and foreign; and carefully preserve the archives and unpublished transactions of the Association.

The Assistant Secretary shall aid the Permanent Secretary in recording and authenticating the proceedings of the Association; serve as a member of the Committee of Arrangements, and perform all the duties of Permanent Secretary temporarily whenever that office shall be vacant, either by death, resignation, or removal.

The Treasurer shall have the immediate charge and management of the funds and property of the Association. He shall give to the Board of Trustees bonds for the safe keeping and proper use and disposal of his trust. And through the same Board he shall present his accounts, duly authenticated, at every regular meeting.

The Librarian shall receive and preserve all the property in books, pamphlets, journals, and manuscripts presented to or acquired by the Association, record their titles in a book prepared for the purpose and acknowledge the receipt of the same.

V.—STANDING COMMITTEES.

The Committee of Arrangements shall, if no sufficient reasons prevent, be mainly composed of seven members, of whom the Assistant Secretary shall be one, residing in the place at which the Association is to hold its next annual meeting; and shall be required to provide suitable accommodations for the meeting, to verify and report upon the credentials of membership, to receive and announce all essays and memoirs voluntarily communicated, either by members of the Association, or by others through them, and to determine the order in which such papers are to be read and considered.

The Board of Trustees shall consist of nine members, three of whom shall be elected annually, on the nomination of the Nominating Committee, and shall serve for three years. It shall be the duty of this Board to provide for and superintend the publication and distribution of all such proceedings, transactions, and memoirs of the Association as may be ordered to be published, in such manner as the Association may direct, and in doing this it shall have authority to appoint an editor and such assistants, and determine their salaries, and procure and control such materials as may be necessary for the accomplishment of the work assigned to it. To further facilitate its work, it shall be the duty of the Secretaries of the Association, and of the several sections during each annual meeting, or as soon thereafter as practicable, to deliver to the Board, or such editor or agent as it shall appoint, all such records of proceedings, reports, addresses, papers and other documents as may have been ordered for publication either in the general sessions or in the sections. All moneys received by the Board of Trustees, or its agents, resulting from the discharge of the duties assigned them, must be paid to the Treasurer of the Association, and all orders on the Treasurer for disbursements of money in any way connected with the work of publication, must be endorsed by the President of the Board of Trustees. It shall be the further duty of the said Board of Trustees to hold the official bond of the Treasurer for the faithful execution of his office, to annually audit and authenticate his accounts, and present a statement of the same in its annual report to the Association, which report shall also specify the character and cost of all the publications for the Association during the year, the number of copies still on hand, and the amount of all other property belonging to the Association, under its control, with such suggestions as it may deem necessary.

VI.—FUNDS AND APPROPRIATIONS.

Funds shall be raised by the Association for meeting its current expenses and awards from year to year, but never with the view of creating a permanent income from investments. Funds may be obtained by an equal assessment of not more than ten dollars annually, on each of the delegates and permanent members; by voluntary contributions for specific objects; and by the sale and disposal of publications, or of works prepared for publication.

The funds may be appropriated for defraying the expenses of the annual meetings, including the necessary expenses of the Permanent Secretary in maintaining the necessary correspondence of the Association; for publication; for enabling the Standing Committees to fulfill their respective duties, conduct their correspondence, and procure the materials necessary for the completion of their stated annual reports; for the encouragement of scientific investigation by prizes and awards of merit; and for defraying the expenses incidental to specific investigations under the instruction of the Association, where such investigations have been accompanied with an order on the Treasurer to supply the funds necessary for carrying them into effect.

VII.—PROVISION FOR AMENDMENT.

No amendment or alteration shall be made in any of these articles, except at the annual meeting next subsequent to that at which such amendment or alteration may have been proposed; and

then only by the voice of three-fourths of all the delegates in attendance.

Provided, however, that when an amendment is properly under consideration, and an amendment is offered thereto, germane to the subject, it shall be in order, and if adopted, shall have the same standing and force as if proposed at the preceding meeting of the Association.

BY-LAWS.

I.—ORDER OF BUSINESS.

The order of business at the annual meetings of the American Medical Association shall at all times be subject to the vote of three-fourths of all the members in attendance; and, until permanently altered, except when for a time suspended, it shall be as follows, namely:

1st. The calling of the meeting to order by the President elected the preceding year, or, in his absence, by one of the Vice-Presidents.

2nd. The report of the Committee of Arrangements on the credentials of members, after the latter have registered their names and addresses, and the titles of the institutions which they represent.

3d. The reception of members by invitation.

4th. The election of permanent members.

5th. The reading of notes from absentees.

6th. The hearing of the annual address of the President.

7th. The reception of the reports of all special committees and voluntary communications, and their reference to the appropriate Sections.

8th. The appointment of the committee of one from each State represented, to nominate officers of the Association, and to fill the standing committees.

9th. The reading and consideration of the reports of the Standing Committees, of Publication, on Prize Essays, and of Chairmen of Sections.

10th. Resolutions introducing new business, and instructions to the permanent committees.

11th. The selection of the next place of meeting.

12th. The report of the Nominating Committee, and the election of officers of the Association.

13th. Reports from the several Sections.

14th. Reading of the minutes by the Secretary.

15th. Unfinished and miscellaneous business.

16th. Adjournment.

II.—SECTIONS.

The general meetings of the Association shall be restricted to the morning sessions; and the afternoon sessions, commencing at three o'clock, shall be devoted to the hearing of reports and papers and their consideration, in the following *Sections:*—

1. Practical Medicine and Physiology.
2. Obstetrics and Diseases of Women.
3. Surgery and Anatomy.
4. State Medicine.
5. Ophthalmology.
6. Diseases of Children.
7. Dental and Oral Surgery.
8. Medical Jurisprudence and Neurology.
9. Dermatology and Syphilis.
10. Laryngology and Otology.
11. Materia Medica and Pharmacy.

On the second day of each annual meeting each Section shall nominate its own officers to serve for the next ensuing year, their duties to commence with the close of the annual meeting at which they are nominated and to continue until their successors are appointed.

The Section on State Medicine shall be composed of one member from each State, one from the army and one from the navy of the United States, representing, as far as practicable, the State Boards of Health. The officers of this Section to be also designated by the Committee on Nominations.

The Chairman of each Section shall prepare an address on the recent advances in the branches belonging to his Section, including such suggestions in regard to improvements or methods of work as he may regard important, and present on the first day of its annual session the same to the Section over which he presides. The reading of such address not to occupy more than forty minutes.

It shall be the duty of every member of the Association who proposes to present a paper or report to any one of the Sections, to forward either the paper, or a *title* indicative of its contents, and its *length*, to the Chairman of the Committee of Arrangements at least one month before the annual meeting at which the paper or report is to be read. It shall also be the duty of the Chairman and Secretary of each Section to communicate the same information to the Chairman of the Committee of Arrangements concerning such papers and reports as may come into their possession or knowledge, for their respective Sections, the same length of time before the annual meeting. And the Committee of Arrangements shall determine the order of reading or presentation of all such papers, and announce the same in the form of a programme for the use of all members attending the annual meeting. Such programme shall also contain the rules specified in the By-laws and Ordinances concerning the consideration and disposal of all papers in the Sections.

No paper shall be read before either of the Sections, the reading of which occupies more than twenty minutes. Such papers shall be referred by the Section to sub-committees specially appointed for their examination. The sub-committees shall be allowed thirty days for such examination; at the end of which time they shall for-

ward the papers to the Board of Trustees, with such recommendation as they may deem proper. The author of such papers, however, may read abstracts before the Section within the allotted twenty minutes. No member shall address the Section more than once upon the same subject, nor speak longer than fifteen minutes without unanimous consent.

All papers presented directly to the Association, and other matters, may, at the discretion of the Association, be referred to the various Sections for their consideration and report.

III.—STANDING COMMITTEES.

The following are the Standing Committees of the Association, to be filled by the Committee on Nominations, and to report at the next annual meeting subsequent to their appointment, namely, Committee of Arrangements, Board of Trustees, and Committee on American Medical Necrology.

The *Board of Trustees* shall append to each volume of the *Transactions* hereafter published, a copy of the Constitution, By-laws and Code of Ethics of the Association. It shall print conspicuously, at the beginning of each volume of the *Transactions* the following disclaimer, namely, The American Medical Association, although formally accepting and publishing the reports of the various standing committees, holds itself wholly irresponsible for the opinions, theories or criticisms therein contained, except when otherwise decided by special resolution.

The *Committee on American Medical Necrology* shall consist of one member for each State and Territory represented in the Association, whose duty it shall be to procure memorials of the eminent and worthy dead among the distinguished physicians of their respective States and Territories, and transmit them to the chairman of this committee on or before the 1st of April of each and every year.

IV.—THE PUBLICATION OF PAPERS AND REPORTS.

No report or other paper shall be entitled to publication in the volume for the year in which it shall be presented to the Association, unless it be placed in the hands of the Board of Trustees on or before the first day of July. It must also be so prepared as to require no material alteration or addition at the hands of its author.

Authors of papers are required to return their proofs within two weeks after their reception; otherwise they will be passed over and omitted from the volume.

Every paper received by this Association and ordered to be published, and all plates or other means of illustration, shall be considered the exclusive property of the Association, and shall be published and sold for the exclusive benefit of the Association.

The Board of Trustees shall have full discretionary power to omit from the published *Transactions*, in part or in whole, any paper that may be referred to it by the Association, or either of the Sections, unless specially instructed to the contrary by vote of the Association.

V.—ASSESSMENTS.

The sum of five dollars shall be assessed annually, upon each delegate to the sessions of the Association, as well as upon each of its permanent members, whether attending or not, for the purpose of raising a fund to defray necessary expenses. The payment of this sum shall be required of the delegates and members in attendance upon the sessions of the Association previously to their taking their seats and participating in the business of the sessions. Permanent members, not in attendance, shall transmit their dues to the Treasurer.

Any permanent member who shall fail to pay his annual dues for three successive years, unless absent from the country, shall be dropped from the roll of permanent members, after having been notified by the Secretary of the forfeiture of his membership.

VI.—DELEGATES FROM THE MEDICAL STAFFS OF THE ARMY, NAVY, AND MARINE-HOSPITAL SERVICE.

Delegates representing the medical staffs of the United States Army and Navy, shall be appointed by the Chief of the Army and Navy Medical Bureaus, and the U. S. Marine-Hospital Service. The number of delegates so appointed shall be four from the army medical officers, and an equal number from the navy medical officers, and one from the Marine-Hospital Service.

VII.—DELEGATES TO FOREIGN MEDICAL SOCIETIES.

The President shall be authorized annually to appoint delegates to represent this Association at the meetings of the British Medical Association, the American Medical Society at Paris, and such other scientific bodies in Europe or other foreign countries as may be affiliated with us.

VIII.—DUTIES OF MEMBERS.

No one shall be permitted to address the Association, except he shall have first given his name and residence, which shall be distinctly announced from the chair, and the member may be required to go forward and speak from the stand, but not more than ten minutes at one time.

No one appointed on a special committee, who fails to report at the meeting next succeeding the one at which he is appointed, shall be continued on such committee, or appointed on any other, unless a satisfactory excuse is offered.

IX.—CONDITION EXCLUDING REPRESENTATION.

No State or Local Medical Society, or other organized institution, shall be entitled to representation in this Association that has not adopted its Code of Ethics; or that has intentionally vio-

lated or disregarded any article or clause of the same.

X.—OF THE PREVIOUS QUESTION.

When the previous question is demanded, it shall take at least twenty members to second it; and when the main question is put under force of the previous question and negatived, the question shall remain under consideration the same as if the previous question had not been enforced.

XI.—JUDICIAL COUNCIL.

A council, consisting of twenty-one members, shall be appointed by the Nominating Committee, whose duty it shall be to take cognizance of, and decide, all questions of an ethical or judicial character that may arise in connection with the Association. Of the twenty-one members of the council first appointed the seven first named on the list shall hold office one year, and the second seven named shall hold office for two years.

With these exceptions the term of office of members of the council shall be three years, seven being appointed by the Nominating Committee annually.

The said council shall organize by choosing a President and Secretary, and shall keep a permanent record of its proceedings. The decisions of said council on all matters referred to it by the Association shall be final, and shall be reported to the Association at the earliest practical moment.

All questions of a personal character, including complaints and protests, and all questions on credentials, shall be referred at once, after the report of the Committee of Arrangements or other presentation, to the *Judicial Council*, and without discussion.

XII.—NEW BUSINESS.

No new business, resolutions by members, etc., shall be introduced at the general session of the Association except on the first and fourth days of meetings.

XIII.—OFFICERS AND COMMITTEES.

In the election of officers and appointment of committees by this Association and its President, they shall be confined to members and delegates present at the meeting, except in the Committee of Arrangements.

XIV.—ADDRESSES.

The Association shall annually elect, on the nomination of the Nominating Committee, three members of the profession, eminent in some of its departments, to deliver addresses in the general session of the next ensuing annual meeting—one on some topic or topics relating to general medicine, another relating to general surgery, and the third relating to public medicine, including under that head, hygiene, sanitation, prophylaxis, education and medical legislation, each of such addresses not to exceed one hour it its delivery.

The following resolution was adopted at the session of 1888:

That in future, each delegate or permanent member, shall, when he registers, also record the name of the Section, if any, that he will attend, and in which he will cast his vote for Section officers.

Also, that the Permanent Secretary may be enabled to erase from the roll the names of those who have forfeited their membership, the Secretaries *are, by special resolution*, requested to send to him annually, a corrected list of the membership of their respective Societies.

ORDINANCES.

Resolved, That the several Sections of this Association be requested, in the future, to refer no papers or reports to the Board of Trustees, except such as can be fairly classed under one of the three following heads, namely: 1. Such as may contain and establish *positively* new facts, modes of practice or principles of real value. 2. Such as may contain the results of well-devised original experimental researches. 3. Such as present so complete a review of the facts on any particular subject as to enable the writer to deduce therefrom legitimate conclusions of importance.

Resolved, That the several Sections be requested, in the future, to refer all such papers as may be presented to them for examination by this Association, that contain matter of more or less value, and yet cannot be fairly ranked under either of the heads mentioned in the foregoing resolution, back to their authors with the recommendation that they be published in such regular medical periodicals as said authors may select, with the privilege of placing at the head of such papers, "Read to the Section of the American Medical Association on the day of 18 ." (Vide *Transactions*, Vol. xvi, p. 40.)

Resolved, That, instead of yearly reprinting the list of members of the American Medical Association, the Board of Trustees be instructed to prepare and print in the *Transactions* an alphabetical catalogue triennially, containing a complete list of the Permanent Members, with their names in full, designating their residences, the year of their admission, the offices they have held in the Association, and, in case of death or rejection, the date thereof. (Vide *Transactions*, Vol. xvii, p. 33.)

Resolved, That no report or other paper shall be presented to this Association unless it be so prepared that it can be put at once into the hands of the Permanent Secretary, to be transmitted to the Board of Trustees. (Vide *Transactions*, Vol. xvii, p. 27.)

Resolved, That the Permanent Secretary hereafter and from this date be authorized to draw a

warrant upon the Treasurer for the expenses incurred in his attendance upon each session of the Association, and that the Treasurer is hereby instructed to pay the same. (Vide *Transactions*, Vol. xviii, p. 42.)

Resolved, That the faculties of the several medical colleges of the United States be recommended to announce explicitly in their annual announcements, circulars and advertisements that they will not receive certificates of time of study from irregular practitioners, and that they will not confer the degree upon any one who may acknowledge his intention to practice in accordance with any exclusive system. (Vide *Transactions*, Vol. xix, p. 31.)

Resolved, That those gentlemen who desire to report on special subjects, and will pledge themselves to report at the next meeting, be requested to send their names, and the subjects on which they desire to report to the Permanent Secretary. (Vide *Transactions*, Vol. xix, p. 42.)

Resolved, That hereafter the necessary expenses for rent of hall for general meetings and rooms for Sections to accommodate the annual meetings, and the necessary expenses for cards of membership, be paid out of the treasury of the Association. (Vide *Transactions*, Vol. xix, p. 42.)

Resolved, That each State Medical Society be requested to prepare an annual register of all the regular practitioners of medicine in their respective States, giving the names of the college in which they may have graduated, and date of diploma or license. (Vide *Transactions*, Vol. xx, p. 20.)

Resolved, That this Association recognizes specialties as proper and legitimate fields of labor.

Resolved, That specialists shall be governed by the same rules of professional etiquette as have been laid down for general practitioners.

Resolved, That it shall not be proper for specialists publicly to advertise themselves such, or to assume any title not specially granted by a regularly chartered college.

Resolved, That private handbills addressed to members of the medical profession, or by cards in medical journals, calling the attention of professional brethren to themselves as specialists, be declared in violation of the Code of Ethics of the American Medical Association. (Vide *Transactions*, Vol. xx, p. 28.)

Resolved, That a committee of one be appointed residing at Washington, to render the Librarian of Congress such assistance as the interests of the Association may require. (Vide *Transactions*, Vol. xx, p. 29.)

WHEREAS, The proper construction of Art. IV, Sec. 1, Code of Ethics, A. M. A., having been called for, relative to consultation with irregular practitioners who are graduates of regular schools.

Resolved, That said Art. IV, Sec. 1, Code of Ethics, excludes all such practitioners from recognition by the regular profession. (Vide *Transactions*, Vol. xx, p. 30.)

Resolved, That if any member fail to reply for more than one year to the circular sent to him by the Board of Trustees he shall forfeit his right to the volume, and it shall revert to the Association, to be sold to any applicant at the current rates. (Vide *Transactions*, Vol. xxi, p. 30.)

Resolved, That the Committee of Arrangements for the next ensuing meeting of this Association, and for all meetings thereafter, be directed to prepare a list of members present on a separate roll, for convenience and accuracy in calling the ayes and nays when the same shall be demanded. (Vide *Transactions*, Vol. xxi, p. 60.)

Resolved, That each year, until otherwise ordered, the President-elect and the Permanent Secretary be directed to appeal in the name of the Association to the authorities of each State where no State Board of Health exists, urging them to establish such boards. (Vide *Transactions*, Vol. xxvi, p. 50.)

Resolved, That the Permanent Secretary is hereby directed annually to report the names of States where boards of health exist, and also of those which decline to establish them; said report to form a part of the annual proceedings of the Association. (Vide *Transactions*, Vol. xxvi, p. 50.)

Resolved, That members of the medical profession who in any way aid or abet the graduation of medical students in irregular or exclusive systems of medicine, are deemed thereby to violate the spirit of the ethics of the American Medical Association. (Vide *Transactions*, Vol. xxvii, p. 48.)

Resolved, 1. That the American Medical Association adopts the International Metric System, and will use it in its Transactions. (Vide *Transactions*, Vol. xxx, p. 44.)

2. Requests that those who present papers at its future meetings employ this system in their communications or reprints thereof. (Vide *Transactions*, Vol. xxx, p. 44.)

3. Requests the medical boards of the hospitals and dispensaries to adopt the Metric System in prescribing and recording cases; and that the Faculties of the medical and pharmaceutic schools adopt it in their didactic, clinical, or dispensing departments. (Vide *Transactions*, Vol. xxx, p. 44.)

Resolved, That the President and Secretary of this Association are directed to annually petition Congress to enact a law which shall permit every person engaged in a scientific pursuit to import for his own use, free of duty, any one book or instrument appertaining to his special pursuit. (Vide *Transactions*, Vol. xxx, p. 45.)

Resolved, That the above-named officers are further directed to urge the State Medical Socie-

ties and their auxiliary branches to aid this Association in accomplishing this purpose, by petitions to Congress, and by otherwise influencing Congressmen. (Vide *Transactions*, Vol. xxx, p. 45.

Decision by Judicial Council: A gentleman who is not in affiliation with a County, District, or State Medical Society, where such organizations exist, is *not* entitled to be registered as a permanent member upon the claim of having been a delegate from a body not now entitled to representation in this body. (Vide *Transactions*, Vol. xxx, p. 57.)

Resolved: First. That a committee of five be appointed by the President of the Association, to be called the Standing Committee on "Atmospheric Conditions, and their relations to the prevalence of Diseases."

Second. That that committee be authorized to select such places as will best indicate atmospheric conditions in the more important climatic and sanitary districts of the United States—not less than six, nor more than twelve—and establish therein a means for continuous observation and record of all appreciable conditions of atmosphere, according to the most approved methods, and of the origin and prevalence of all acute diseases.

Third. That the Committee, through their chairman, be authorized to draw upon the Treasurer of this Association for such sums as may be found necessary for the proper execution of the work assigned to it, the aggregate amount not to exceed $500, during the ensuing year, and that a detailed report of all sums drawn and expenditures made must be presented at the next annual meeting of the Association. (Vide *Transactions*, Vol. xxxii, p. 35.)

Resolved, That the regular graduates of such dental and oral schools and colleges as require of their students a standard of preliminary or general education, and a term of professional study equal to the best class of medical colleges of this country, and embrace in this curriculum all the fundamental branches of medicine, differing chiefly by substituting practical and clinical instruction in dental and oral medicine and surgery, in place of practical and clinical instruction in general medicine and surgery, be recognized as members of the regular profession of medicine, and eligible to membership in this Association on the same conditions and subject to the same regulations as other members. (See JOURNAL OF THE AMER. MED. ASSOC'N, Vol. viii, p. 722.)

Whereas, It has been the unswerving policy of the Trustees for the publication of THE JOURNAL, to enlarge and increase the value of THE JOURNAL as fast as the income of the Association will permit, therefore,

Resolved, That said Board of Trustees be a Standing Committee on Finance to which all propositions for the appropriation of money, made hereafter, shall be referred and reported upon before final action on the same by the Association. (See JOURNAL OF THE AMER. MED. ASSOC'N, Vol. viii, p. 722, 1887.)

MEDICAL PROGRESS.

Therapeutics and Pharmacology.

PROFESSOR LIEBREICH'S REMEDY FOR TUBERCULOSIS.—LIEBREICH has given to the Berlin Medical Society an account of his newly proposed remedy which consists of cantharidate of potash—being 0.2 gram of pure cantharidin and 0.4 gram of potassic hydrate—in 20 cubic centimetres of water. He uses the remedy by subcutaneous injections, beginning with not more than one-fiftieth part of a decimilligram of the solution. The dose is gradually increased until one or two decimilligrams have been attained; it is likely that six decimilligrams will be found to be the maximum dose. The drug appears to affect diseased tissues only, and it may be applicable to other affections besides tuberculosis. Drs. Heymann and B. Fraenkel have made the clinical experiments thus far reported. They have no cures to report, but they have been agreeably impressed by the measure of amelioration in some of their cases and the absence of any untoward consequences. It has been found that expectoration has been increased, an effect which, as Liebreich infers, is due to the specific property of cantharidin to excite serous exudation from capillary vessels, especially in those that have already been the subject of morbid irritation.

Medicine.

ARTHRITIS BLENNORRHOICA.—DEUTSCHMANN (*Archiv für Ophthalmologie*) has observed a child three weeks old, with ophthalmia neonatorum, that later presented redness and swelling of the knee-joint. Gonococci were found in the secretion of the conjunctival sack in large numbers, and also in smaller proportion in a portion of the joint secretion obtained by exploratory puncture. The writer is of the opinion that the cocci were carried directly by the blood or lymphatics, from the conjunctival sack to the joint.

LEAD POISONING TREATED BY IODIDE OF IRON.—The following practical suggestion in *The Lancet*, for February 14, is quoted from a medical journal of Lille, full title not given, regarding the treatment of workmen in white-lead factories, who suffer from lead-poisoning. It is stated by M. Lavrand that he has found the iodide of iron, in the form of pills as prescribed in the French Codex, very efficious in the above named condition. Sometimes he gives these pills

alone, at other times he combines the iron with the phosphide of zinc. Under this treatment, workmen who have already begun to show signs of plumbism were enabled to continue their occupation; their general health also improved, and the amount of hæmoglobin was increased.

Obstetrics and Diseases of Women.

OVARIOTOMY DURING PREGNANCY. — The *British Medical Journal* contains an editorial comment on the report of ENGSTROM, of Helsingfors, concerning seven cases of the above named operation, published in the *Annales de Gynecologie* for November, 1890. In two of these cases the ovariotomy was performed during the second month, while the other five ranged between the third and seventh months of gestation. All seven patients survived the operation, and with a single exception all went on their time of accouchment, giving birth to living children. In the exceptional case abortion occurred at the third month, and it is stated that she had aborted three times previously, early in gestation. In the course of the operation in this case the uterus was wounded, as the tumor was sessile. For some years past, pregnancy has not been held by ovariotomists to be a contra-indication to abdominal operations, since it has been found that such operations are not only not necessarily fatal, and that they do not of necessity result in abortion. In some cases there have been removed successfully cysts of large size or large solid tumors, the very gravity of the ovarian disease having been the incentive to the surgeon to undertake the operation, in order that by so doing the pregnant uterus might be liberated from its ovarian complication. On the other hand, a small tumor has been regarded as an indication to operation, since the progress of uterine evolution in pregnancy may involve a torsion of the ovarian pedicle and all its perilous sequels.

As to the method of operation in these cases, it is advised that the incision should be made high, and begin near the umbilicus, especially if the tumor lies high, so as to avoid as far as possible any excessive traction on the pedicle of the tumor. The uterus should be exposed as little as possible during the operation, since atmospheric contact is often an excitant to uterine contraction. A warm sponge should be made to cover the exposed surface during the time of the tumor's extraction. After the operation, a carefully adjusted bandage will ordinarily secure the healing abdominal wound against damage during the subsequent stages of gestation. Engstrom favors the removal of an ovarian complication of pregnancy whenever the diagnosis becomes clear, and he quotes the experience of Jetter to the effect that the tumor, if left alone, is liable to become a serious source of danger. Some of the worst cases of torsion of the pedicle have occurred during pregnancy, and the fœtus is in especial danger, not less than 48 per cent. perishing, either by a premature arrest of pregnancy or by accident during parturition. The statistics obtained by Engstrom in regard to the results of operation in these cases appear to show that not more than 20 per cent. was attended by premature delivery; and in some of these cases there was a wounding of the uterus in the course of the operation—and where this complication arises the presumption that the uterus will be evacuated is almost inevitable. It is not, of course, claimed that ovariotomy can be practiced in all these cases, as for example, in those patients where the tumor is large and lies low, occupying the pelvic cavity, and the uterus has already developed to a considerable size. In one such case, Engstrom induced labor at the seventh month, and afterwards removed the tumor.

Pathology.

SCARLATINAL CIRRHOSIS.—DR. SAUNDBY, of Birmingham, in the *British Medical Journal*, December 27, treats of some of the rarer forms of hepatic cirrhosis, such as the diabetic, rachitic and scarlatinal varieties. In regard to the last named variety, he thinks that a decidedly practical interest may be involved in it as a possible cause of those not very uncommon cases of cirrhosis met with at the post-mortem table in young children. Scarlatinal cirrhosis may be said to be known only to the pathologists, who have found it in the bodies of persons dead from the sequelæ of scarlet fever. The liver, in these cases, presents no abnormal change that can be recognized by the naked eye, but the microscope shows commencing new formation of fibrous tissue in the portal canals, fissures and spaces.

Ophthalmology.

PANOPHTHALMITIS.—DR. VÉNIDÈS, of Smyrna, (*Journal de Médecine de Paris*), Feb. 1, 1891), claims that early operative interference should be insisted upon in all these cases. He reports one case of evisceration in a child a few weeks old, that was followed by recovery in a case apparently hopeless.

In adults he regards enucleation as the preferable procedure, while in children he thinks evisceration should be employed. He altogether rejects sections of the optic nerve as it leaves a foyer of infection, that may lead to meningitis.

CORTICAL BLINDNESS.—FÖRSTER (*Archiv für Ophthalmologie*, xxvi, 1) offers the following conclusions from his observations: 1. The deviation of the line of demarkation toward the defective side, so often met with in homonymous hemianopsia, does not depend upon a mingling of the elements of both optic tracts in the retina, but upon the favorable vascular conditions of the point of sharpest perception in the occipital cor-

tex. 2. Bilateral hemianopsia is not necessarily connected with complete loss of function in both halves of the visual fields of both eyes. 3. The cortex of the occipital lobe governs the topographical ideas or conceptions, whether acquired by the sense of sight or the sense of touch, or by the consciousness of effected muscular movements, or by descriptions. If these portions of the brain become diseased, the power to grasp or to reproduce topographical conceptions is lost. 4. For color distinction, it is not enough that, with complete integrity of the retina, a small portion of the cortical region should be intact in its functions. The power to distinguish color is much more readily lost than the power to distinguish the shape of small letters, when the nutrition of the cortical elements is disturbed. 5. Destruction of the cortex in the occipital lobes does not produce atrophy of the optic nerves.—*N. Y. Medical Journal.*

DETERMINATION OF REFRACTION.—SCHWEIGGER uses the phrase "illumination test" to describe the process of retinoscopy, or keratoscopy, or coreoscopy, because its essential purpose is to determine the optical value of the displacement of the illuminated field in the fundus of the eye, by revolving the mirror upon its axis. The test is of special value in the determination of strabismus.

Bacteriology.

TYPHOID AND PSEUDO-TYPHOID BACILLI IN RIVER WATER.—DR. CASSEDEBAT (*Annales de l'Institut Pasteur*, No. 10, October, 1890), following up Rietsch's work on the river waters of Marseilles, gives the result of an examination of seventy specimens of water from which 250 cultivations were made, with a view of determining whether the Eberth bacillus is to be found in the waters of the Durance which supply a part of the city where typhoid fever is endemic and often epidemic. In no case was he successful in finding the Eberth bacillus, but he was able to separate three bacilli—"pseudo-typhoid bacilli"—which resemble the typhoid bacillus in many respects; like it, they can all withstand the action of pretty strong carbolic acid. They all present clear spaces or deeply stained masses, which might readily be taken for spores; but they and the true typhoid bacillus containing these bodies are all killed at a temperature of a little over 45° C. They stain equally badly by Gram's method. They have a lateral and oscillatory motion as well as the forward motion. The plate cultivations are so much alike that unless all four can be seen together it is difficult to distinguish one from the other. On potatoes, in broth, and in milk, they are alike, except that they develop with different degrees of rapidity and vary somewhat as regards the alkalinity and acidity of their products at the end of about thirty days, and also as to the degree and time of appearance of the turbidity produced in broth. There are differences, however, to be observed in these organisms grown in broth or milk to which small quantities of the various aniline staining reagents have been added. The ordinary cultivation methods are sufficient to distinguish these four forms from ten others (a list of which is given in the paper) for which the typhoid bacillus has at times been mistaken. None of the pseudo forms are quite so toxic to white mice as the true form, and one of them is quite innocuous. Although Cassedebat was not able to find the true form in water taken from the water supply which was most open to contamination, he found that this was not because bacilli could not live in water, as in distilled water, to which a cultivation had been purposely added, he could easily distinguish its presence at the end of forty-four days, and when added along with half-a-dozen other forms he could find them at the end of seventeen days. He comes to the conclusion, therefore, that the true typhoid bacillus does not occur in water so frequently as is sometimes represented, and that one or other of the forms of pseudo-typhoid bacilli has in certain cases been mistaken for it.—*British Medical Journal.*

MEDIA FOR CULTIVATION OF TUBERCLE BACILLUS.—SIR HUGH BEEVOR, at a recent meeting of the Pathological Society of London, read a note on "Media for Cultivation of the Tubercle Bacillus." The results he had obtained showed how diverse might be the media that could be employed, and how wide the variations of temperature in which the bacilli would grow. His observations on potato cultivations agreed with those of other observers—that the growth was very slow, there being from twenty days to a month before the first sign of growth appeared. It was stated that cultivations on the potato for three generations did not diminish the virulence of the organism. He found that the bacilli grew in broth to which glycerine had been added at a temperature lower than they did on potato or in glycerine agar-agar, and he showed tubes which had been kept at a temperature not exceeding 60° F. Bacilli cultivated in glycerine agar-agar to which corrosive sublimate in the proportion of 1 in 200,000 had been added were hindered slightly in their growth. This proportion of perchloride when compared with the average body weight of a man equalled from five to six grains. The demonstration of the wide range of temperature at which the organisms would grow was interesting in suggesting that their habitat was probably wider than had been supposed. Dr. Crookshank said that the paper had involved a very great amount of labor, the growths being very slow and requiring constant watching. The results of inoculation of animals with these subcultures when published would prove of great interest.

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SATURDAY, MARCH 28, 1891.

THE ABUSE OF THE FOOT.

This humble member may be likened, mechanically, to an arch of five single boulders of unequal size. The abutments are the calcaneus on one side and the metatarsi on the other, and the thrust which the load on the astragalus exerts on these two points is equalized by the plantar muscles and fascia. As a matter of fact, like the triangular bridge at Croyland, the foot has more than two points of support. The posterior haunch of the arch of the foot is the calcaneus alone, but the anterior haunch divides first into two, then into four, and then into five branches. Not only does the load on this arch vary from moment to moment, but almost every *voussoir* is subject to strains in many directions from tendons or muscles attached to it. The resultant of these varying factors is a living equilibrated polygon, a living arch.

In every movement of the knee there is a corresponding change in this subtle arch, as may be demonstrated by the reader by crossing one leg over his knee. To go a little further, changes in the position of the body in any direction are followed by related changes in the form of the foot. It is not only modified in its form by momentary exercise, but its growth and development follow the needs of the body which it supports. To reverse the comparison, the supple, graceful foot makes healthful exercise and graceful activity a possibility. The undeveloped or unhealthy foot is a cause of bodily and mental disease, as we shall attempt to show.

The anthropomorpha and children, in walking, turn the outer edge of the sole downward, their feet being better adapted to climbing. In the untrammeled foot of the youth the hallux is quite opposible, and the whole foot is muscular and expressive. This expressiveness and sympathy with the ground, we sometimes see in bathers and in base-ball players, whose feet are properly dressed. It is manifested in a coördination of muscular action, which, beginning in the contact of the feet with the earth, is reflected up through all the muscles of the body to the face.

Unfortunately, our civilization is in the prohibitive stage. The feet of our children are encased at an early age in unyielding boxes. The muscles of the sole are arrested in their development, and the subtle foot is made into an unyielding stump. The circulation in the extremity is impeded during half the day, and during the time when it is called into greatest use. The ligaments and bones fail to develop symmetrically from restrained function and inadequate nutrition. As a result, when the burdens and emergencies of life fall upon the unfortunate victim of civilization, sprains and dislocations are of frequent occurrence. Nor is the arrest of development noticed in the plantar muscles only; it is, on the contrary, felt in all those muscles of locomotion which are called into play in graceful walking, and are unused in stumping about on the stilts fashion prescribes. Especially is the tibialis porticus undeveloped, and as the load on the astragalus increases with the weight of the body, the resultant of all the forces on the bones of the foot determines "a joint of rupture." This is more often brought about by the coincident stretching of the plantar fasciæ, supporting the arch, by the use of shoes which bring them in contact with the soffit, or under surface of the arch. As soon as the shoes grow old, or when they are exchanged for loose, flexible slippers, the plantar fasciæ drop to a straight line again, and the abutments of the arch separate so far that a joint of fracture appears, usually at the top of the arch. Thus results that most serious and refractory condition called flat foot.

It must not be supposed that flat foot is to be applied to those conditions only in which the plantar arch is wholly collapsed. Almost as painful conditions are to be observed where the plantar fasciæ have been stretched only enough to allow all or most of the strain to come on the ligaments

of the joints. This strain gives rise to a traumatic inflammatory process, which has been termed by GOSSELIN "tarsalgia" of the young adults. It results in a muscular immobilization of the foot on account of the pain. Then follows, as a consequence of the vascularization of the bones, a melting together of the joint surfaces, and, at last, bony union in the segments of the arch. This process requires years of suffering.

The method which prevails in foot-wear is responsible for this fearful condition, and it is aggravated by the habit which prevails in schools of having children stand in classes for a long time. Shopkeepers, and bookkeepers, and mechanics who have to stand long in tight shoes, are apt to acquire the condition. Among dentists it is easily noticed in one foot more than the other. The diagnosis is made by the symptoms, by the form of the foot, and by the track which the bare foot makes on paper.

The treatment is mechanical and preventive. The former may be read in the literature, but we should like to call attention to the latter for the benefit of posterity. Children should not wear our box shoes, but a flexible, loose, moccasin-like slipper with no heel. The shoes of young people should have added a stiff heel and a stiff half-sole, nothing more. The constriction of the ankle and instep should be avoided, because it results in interference with the nutrition of the foot.

So small a matter can hardly receive too much attention when we see how necessary are sound feet to exercise, health and happiness. In the fierce struggle for existence which is now upon our race, survival will depend on the application of intelligent attention to little matters. The prejudice of custom and fashion ought not to taboo the scientific discussion of any subject, not the least important of which, is the normal development of the foot.

IS CANCER A PARASITIC DISEASE?

The analogy, in many respects, of the malignant tumors to those infective diseases, such as tuberculosis and leprosy, which have been shown to be due to the presence of microörganisms, has naturally suggested to pathologists the possibility of a similar cause, and in 1887 SCHEUERLEN, published an account of a bacillus which he had found in cancers, and which he believed to be the *materies morbi*. Similar observations have since been published by others, but his views do not seem to have met with very wide acceptance. More recently, attention has been called to other bodies occurring in cancerous tumors, which have been thought to belong to the lowest order of animal life. DARIER, in 1889, described a parasite occurring in Paget's disease of the nipple, which he believed to be a coccidium—a member of the order of sporozoa. ALBARRAN, THOMA, WICKHAM and SJOBRING have since then reported observations of the same kind, although THOMA does not commit himself as to the nature of the organism. Finally, RUSSELL has published in the *British Medical Journal*, an account of what seem to have been very painstaking investigations on what he considers a characteristic organism of cancer. He demonstrates it by staining the sections with fuchsine, decolorizing in water and alcohol, and then staining with iodine green for contrast. The bodies in question retain the fuchsine stain, which is removed from the other tissues. They are minute, spherical bodies, surrounded in many cases, by a transparent capsule, and apparently propogating both by spores and buds. RUSSELL, although he believes them to be identical with some, at least, of the organisms described by previous observers, is disposed to think them of vegetable nature, belonging to the sprouting fungi, of which the yeast plant is the most familiar example.

They were found in forty-three out of forty-five cases of cancer of different organs, often in great numbers. In non-cancerous tissues they were found five times in over fifty cases. In three of these, owing to the presence of ulcerating surfaces, the author thinks there was a probability of infection, which might ultimately have developed the cancerous character. Of the other two, one was an adenoma of the breast, the other a gumma of the meninges.

DR. RUSSELL'S conclusions have been called in question in various quarters. EDINGTON considers the bodies described to be cells in a condition of hyaline degeneration, and gives drawings which seem to tend to confirm this view. CATTLE finds that bodies presenting much the appearance of those described and figured by RUSSELL may be produced by the presence in the staining solution of minute drops of the aniline

used in its preparation. On the whole, at the present time, the probabilities seem rather against the parasitic nature of the bodies in question. A theoretical objection to any parasitic hypothesis might be raised from the fact that, although carcinomata usually resemble, in their histological structure, the epithelium of the tissue in which they originate, metastatic deposits develop with the same structure as the original tumor. This would appear to favor the view that the infecting elements are the cells of the tumor rather than a foreign organism. In view of the doubt as to the interpretation to be put on the appearances, cultivation experiments seem desirable.

SURGERY OF THE GALL BLADDER.

SIR SPENCER WELLS, in his Bradshaw lecture, recently published, presents a review of the status of modern abdominal surgery, in the course of which he refers to the operations that are now done on the liver and gall bladder. He admits that many successful cases are on record of removal of gall stones and subsequent closure of the gall bladder by sutures, as well as of fixing it to the abdominal wall and forming a fistulous opening, but he is strong in his opinion, expressed first about five years ago, that an excision of the gall bladder, or cholecystectomy, is the preferable practice. He says that he can almost foresee that the general rule for future surgeons will be to expose the gall bladder, empty it with a syringe, raise the liver, protect the stomach and intestines by sponges, tie the cystic duct, with two ligatures, divide it between them, separate the gall bladder from the liver by knife or scissors, and then close the abdominal wound.

RESUSCITATIVE EFFORTS IN THE NEW-BORN.

When it is stated by an authority of eminence that, "I believe the attitude of the profession, in general, is one of incredulity, as regards the efficacy of the means at our disposal to restore the life of children in the more desperate cases of asphyxia. In my experience it is the usual procedure to spank the child, to immerse it in hot and cold water, and then to wrap it in warm clothes and place it by the fire to die. Yet the object of medical practice is to save life, and for my part I regard the rescuing of a new-born infant from impending death to be as distinctly a professional triumph as the saving of life by ovariotomy, by Cæsarian section, or by the operation for appendicitis," it becomes the bounden duty of the profession to turn for a moment to a due consideration of the statement, and a thought—or more than thought—of the real possibilities of reducing the number of still-births. We can scarcely agree with the author in believing that the resuscitation of the still-born is to be regarded as an achievement of equal greatness as the conserving of a *developed* life by the surgical procedures above named; yet the importance of rescuing an infant life—where two lives are not in immediate peril—is not to be determined by a comparison. It is clear that if well-directed and patiently-continued efforts will restore life in a goodly number of still-births, then the professional course to pursue admits of no discussion, but does call for more elucidation, a wider and deeper interest, and a continued investigation with a view of both limiting the known causes of still-births, and the perfection of those methods will the more readily insure the return of viability to the one whose spark of life was supposed to have departed.

EDITORIAL NOTES.

CURIOUS SPELLING.—The *Albany Medical Annals* prints a list, received from one of the governmental departments at Washington, showing 169 ways in which the word "pterygium" was spelled—157 attempts in the singular, and 12 attempts in the plural form of the word—in reports to the department from "boards" consisting of three graduates in medicine.

EXTREME ANTISEPTIC VIEWS OF LEOPOLD.—At Prof. Leopold's obstetrical *klinik* but one vaginal examination is made—except in pathological cases—and the examiner must first pass through a veritable antiseptic mill. First, the operator must have a general bath and fresh clothing, then a cleansing, rubbing and scrubbing, with brush, soap and water, of the hands and arms for a period of five minutes—being accurately timed during the operation. The follows a brushing for three minutes with a sublimate solution 1:2,000. Everything is then removed and the process of brushing and cleansing is again repeated, this time with a 1:1,000 sublimate solution. After this the hands are to be kept im-

mersed in the antiseptic solution until the patient is ready, when *one* finger may be quickly passed into the vagina. Prof. Leopold really deprecates *any* vaginal examination in normal labor, giving it out that, "The ideal childbeds are those in which no vaginal examinations have been made."

TYPHOID FEVER GERMS IN MILK AND WATER SUPPLY.—Two very interesting and professionally instructive examples of the communication of typhoid fever through contaminated milk and water have lately been added to the record we already have along this line of research. In both instances the outbreak was quite widespread throughout the given district, and careful investigation clearly brought out the exact source of the contagion, and the means of its dissemination. One point appears to be quite certainly indicated by these recurring examples of the spread of this fever, viz., that in typhoid fever the question of a physical resistence to the influence of the poison does not play so important a part as may be the case with other affections. In other words, the essential principle of typhoid does not seem to be a more or less constant factor of our environment; therefore, when it is forced within the circle of extrinsical influences any resisting power is insufficient to its overthrow.

BIRTH-LIST OF CHICAGO.—The completed returns for 1890 place the total number of births at 20,878; number of males born 9,813; number of females 9,452; number of twins 221; and one case of triplets. This proportion of twin and triplet births does not agree with that observed in foreign countries. It is stated that the proportion of triplet births in Saxony is as 1:1,000, in Russia as 1:4,054, in Ireland as 1:4,995, and in England as 1:6,720.

A NEW USE FOR OLD BARRACKS.—Application has been made to President Harrison for the appointment of a commission to visit the abandoned army posts of Southern Colorado and Northern New Mexico with the view of selecting the best site for a National Retreat for Consumptives. It is claimed that the climate of the sections mentioned is probably the most favorable we have for those afflicted with serious lung troubles.

GOLD AND MANGANESE IN TUBERCULOSIS.—Dr. John Blake White read a paper upon the use of gold and manganese, subcutaneously, before the Medical Section of the N. Y. Academy of Medicine, February 17th. While the writer does not claim any specific action for this method of treatment, yet—as with Drs. Shurly and Gibbes—the results have been very promising in a number of cases. Marked improvement has occurred in cases having detailed histories of phthisis. A number of physicians spoke upon this occasion of having observed the good effects mentioned by the author, and upheld the moderate claims put forth. A further outcome is awaited.

RESULTS OF INTUBATION OF THE LARYNX.—Dr. J. Mount Bleyer, of New York City, gives in the *Archives of Pediatrics* an analysis of five hundred and twelve cases of intubation with the following results: "Out of 251 cases of children under three years of age, there were 73 recoveries, and in 260 cases three years of age and over, there were 115 recoveries; total, 189 cases out of 512 operated on." The causes of death are given throughout. The greatest number died from sepsis (39), broncho-pneumonia (40), pneumonia (41), diphtheritic bronchitis (67), bronchitis (45), heart failure (21), exhaustion (20), double pneumonia (16), and membranous croup (12).

MEDICAL ITEMS.

PROGRESS OF STATE MEDICINE.—A Bacteriological Laboratory has been established in connection with the Ontario Board of Health, with Dr. McKenzie in charge.

A POOR FIELD.—Scott County, Kansas, has but one physician, and he is now compelled to leave because of the following conditions: but one natural death has occurred during the past year; obstetrical cases and accidents happen but infrequently; and the atmosphere is so pure, and the people so generally healthy, that even an ordinary living cannot be made by one practicing the healing art. The population of the county is given at 1,260.

HANDY SURGICAL DRESSINGS.—Dr. Clinton B. Herrick (*N. Y. Med. Jour.*), in a paper on "Railroad Surgery" advises that each "caboose" and baggage-car carry a packet containing splints and antiseptic dressings of a simple nature, and so labeled that any man of ordinary intelligence would be able to apply them in case of accident. He argues that it would render the condition of

the injured more comfortable, and his wounds less liable to become septic, until the aid of a surgeon could be had.

REPORTS OF THE ILLINOIS STATE BOARD OF HEALTH.—The medical press generally appear to appreciate the leading position taken by the Illinois State Board of Health in the matter of a higher standard of medical education. The *Boston Medical and Surgical Journal* says: "These publications of the Illinois State Board are an important factor in the gradual improvement which is taking place in the medical colleges."

THE VIRCHOW TESTIMONIAL is assuming large proportions. The seventieth birthday anniversary of this great man occurs on October 13, 1891. The form the testimonial is taking seems to be wise and enduring, viz., a large gold portrait medal to be presented to Professor Virchow himself, while bronze replicas of the same will be given to members of his family, and to a certain number of scientific institutions.

THE CONSTANT BACTERIA OF MILK.—Over forty different varieties of bacteria have been isolated from a specimen of normal milk. They are grouped into classes, and their varied actions produce the changes ordinarily taking place in milk, as well as the extraordinary chemical effects produced under peculiar and unusual circumstances. It is not gainsaid, however, that "foreign" bacteria are not concerned in the uncommon chemical changes.

SUMMER SCHOOL OF MEDICINE.—The Medical Department of the University of Virginia has decided upon the establishment of a summer session, beginning July 13, and continuing two months.

JEFFERSON COLLEGE'S NEW SURGEON.—At a meeting of the faculty of Jefferson Medical College on March 9, H. Augustus Wilson, M.D., was elected Lecturer on Orthopedics in the Jefferson Medical College, and surgeon in charge of the Orthopedic Department of Jefferson Medical College Hospital, vice O. H. Allis, M.D., resigned. Dr. Wilson is professor of General and Orthopedic Surgery in the Philadelphia Polyclinic and College for Graduates in Medicine, surgeon and medical director to the Polyclinic Hospital, lecturer on Orthopedic Surgery in the Woman's Medical College, and was formerly pathologist to the Presbyterian Hospital, and one of the surgeons at St. Mary's Hospital. He is a fellow of the College of Physicians, and of the Philadelphia Academy of Surgery, member of the Philadelphia County Medical Society, and the Medical Society of the State of Pennsylvania.

WOMEN PHARMACISTS IN NEW YORK.—It is stated that there are over one hundred women pharmacists in New York City, not one of whom, however, maintains an independent business.

TUBES FOR KOCHINE.—An order has been placed with a German firm of glass manufacturers for one million tubes of particular form and extra quality of glass, to be used for the general distribution of the now famous "lymph."

ST. LOUIS MEDICAL SCHOOLS.—About 280 diplomas will be given out in St. Louis this month.

A WOMAN'S HOSPITAL FOR MEMPHIS.—A Woman's Hospital Association has been organized under the laws of the State of Tennessee, the object of which is the erection of a properly-equipped hospital at Memphis for the treatment of deserving poor women and children.

MEDICAL TRAINING FOR WOMEN.—Official notice has been given of the admission of women to the Edinburgh Royal Infirmary, under certain conditions which are embraced under six different headings.

INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY.—The seventh meeting under this title will be held in London on August 10–17, with the Prince of Wales as president.

TENTH GERMAN CONGRESS FOR INTERNAL MEDICINE is to be held in Berlin immediately following the Surgical Congress, or from April 6–9. Professor Leyden, of Berlin, will be president. Very interesting discussions will take place, prominent among which, of course, will be the Koch treatment.

SPRING IS WITH US.—March 2, the Medical Department of the University of Louisville conferred the degree of M.D. upon one hundred and fifty candidates.

THE LIBRARY OF THE NEW YORK STATE MEDICAL ASSOCIATION now contains about 8,000 volumes, and 5,000 pamphlets.

TOPICS OF THE WEEK.

CANTHARIDINATE OF POTASH IN TUBERCULOSIS.

Last week's meeting of the Berliner Medizinische Gesellschaft was of exceptional interest. Every place in the hall was filled in expectation of Professor Liebreich's address on his new remedy for tuberculosis. The following is an abstract of the address, some of the principal points being given in the Professor's own words. He began by saying that, though it was not his custom to publish a research the results of which he had not investigated in detail, he felt obliged, by the special circumstances of the case, to do so in this instance.

He gave an account of the principles that had guided him in this and similar researches. Years ago, in his first address on chloral hydrate, he had already pointed out that, in considering a substance, it is of the greatest importance to form a notion of the atomic grouping in the molecule. The observation of this principle led to the discovery of a number of efficacious remedies—for instance, salicylic acid and salicylate of soda. "How long substances can remain unemployed is shown by the example of chloral hydrate, the therapeutic qualities of which were unknown for thirty-seven years after its discovery by Justus von Liebig."

But it would be onesided to be led only by the above principle in research. An illustration of a different method is the discovery of lanolin, by which ointment therapeutics, which had sunk almost into contempt, were raised to a scientific basis. "Then again—and this we owe to Koch—disinfectants were made the objects of inquiry. From the beginning I expressed my opinion that all those substances that exercise a deleterious influence on the lowest organisms outside the body must be inefficacious when introduced into living tissue. In continuation of my former chloral researches, I was able to show, in connection with the 'dead spaces' in chemical reactions that the reaction that takes place in the cell is very different from that which takes place outside of it."

Then, again, Pasteur's theory that bacteria are destroyed by their own products of metabolism was followed up; but the extremely toxic quality of these products has hitherto formed a hindrance to their efficacious therapeutic action. It is to be hoped, however, that the attempts to extract efficacious bactericidal substances from the products of metabolism of the bacteria may yet be attended with success. At present, treatment by attenuated bacterial cultivations is forming the subject of many experiments, but this has no direct relation to pharmaco-dynamic investigations.

Professor Liebreich then turned to his experiments with local anæsthetics, named by him anæsthesia dolorosa, because though they produce local anæsthesia, the injection itself is painful. In the course of investigations with these bodies, it became clear that their effect was not due to chemical action, as in the case of chloral hydrate, but to purely physical causes. It was while engaged in these researches that Professor Liebreich first saw lupus cases which were being treated by tuberculin, and at once formed the opinion that the local action must be due to a substance, whatever its origin, similar in action to those known under the name of "acria." Upon this the speaker's experiments with cantharidin (the active principle of the Spanish fly) were begun. The Spanish fly has been used occasionally in therapeutics since the time of Hippocrates; Pliny mentions it. In later times it occurs in France and Italy under the names of "pastilles galantes" and "diabolini," but its effect has always been uncertain, often dangerous, owing to the impossibility of dosing the active principle with any accuracy.

It was Robiquet who first extracted the active principle, cantharidin, as a chemically pure crystalline substance, which can be weighed and dosed with exquisite accuracy. Its toxic qualities, and especially its irritating action on the kidneys and urino-genital apparatus are well known, and have been described by Cornil, Ida Eliaschoff, and others. When cantharidin is taken internally serum is exuded from the capillaries, not only of the kidneys, but also of the lungs and of other organs, as has been proved by the experiments of the speaker. This is the characteristic action of cantharidin. According to the speaker's theory, the irritability of the capillaries varies in the different parts of the organism. He assumes that an irritated condition of the capillaries favors the process of exudation. Thus a dose of cantharidin, too small to exercise a toxic action on healthy capillaries, will produce exudation in inflamed capillaries. The exudation of serum in tissue may act in two ways, 1, by nourishing the cells and bringing back to their normal condition badly nourished cells; and 2, by the disinfecting action of the serum the affected spot.

In his experiments, which he began at the Augusta Hospital, the speaker made use of a solution containing cantharidinate of potash. The maximum dose was 6 decimilligrams, the usual dose being from 1 to 2 decimilligrams. "If it can be proved that in cantharidin we possess a means of producing an increased secretion of serum at any one spot, we may succeed in concentrating at this spot efficacious substances, which, under ordinary circumstances, do not easily find their way there. We know substances that circulate in, and are decomposed by the blood, but which only with difficulty pass through the capillaries. But if we know that at an affected spot the exudation from the capillaries is facilitated, we can imagine that a larger quantity of an efficacious substance may find its way to this spot, thus strengthening the otherwise feeble disinfecting power of the serum. It seems to me not unlikely that such a combination of two remedies might possibly lead to a new therapeutic method. As regards practical application, special attention should be paid to the kidneys. It is clear that this treatment should not be applied where there is disease of the kidneys. I should advise doses of 1 decimilligram to begin with, followed by an experimental increase to 2 decimilligrams. It is as well to let a day elapse between the injections."

On the conclusion of the address Dr. Heymann and Professor B. Fraenkel exhibited cases treated by cantharidinate of potash, which showed marked and in some cases surprising improvement. Berlin Correspondent.—*British Medical Journal.*

TEMPERANCE MEDICAL MEN IN ENGLAND.

Whatever may be said of total abstainers from alcohol, it can never be alleged truthfully against them that their peculiar habit interferes with their industry, their energy, or their perseverance. When an aspiring member of Parliament is about to contest a district, one of the first things he considers is the strength of the teetotal element. If there be many teetotal organizations, he is sure from the first that he must reckon with them; they will have their own ideas, they are likely to combine in many ideas, and perfectly certain it is that, should they set to work, their physical powers will fully compensate for any shortcomings of an argumentative kind. They will be aggressive, patient, vigilant, and of long endurance. Last week there was an illustration of some of these faculties in those abstainiug members of the profession of medicine who are the representatives of the British Medical Temperance Association, a medical body now numbering close upon 500, and, we believe, overnumbering that figure if they who are learning their "rudimaus," as Dr. Cophagus called it, may be considered medical. This Society, like its fellows, meets ordinarily in its own central rooms in the west end of London, or in the central rooms of its branches in other parts of the Kingdom, and there carries on its work of papers and discussions. But now, on the suggestion of its indefatigable honorary secretary, Dr. Ridge, the members of the Society, with characteristic pertinacity, are moving into new pastures and holding meetings in different districts, in order to invite the busy practitioners of the district visited to meet them in the most convenient way, and discuss with them the great argument for and against alcohol. On Wednesday week last, February 25, the first meeting of this kind was held at Northampton House, St. Paul's-road, Highbury, and for numbers present, as well as for the matter of debate, it must be accepted as a most successful first attempt. Dr. B. W. Richardson, the President of the Association, occupied the chair, and in an openiug address led the way simply towards discussion. Every word that was extreme was avoided as unnecessary. The apathy of the profession as compared with the energy of the clergy was first touched upon, and then the sanitary side of the matter was made a special point for consideration. Alcohol produces a certain large and calculable mortality; the mortality means a large bill of sickness, and the sickness means an enormous loss of labor and the rewards of labor. But we, as a profession of health, said the chairman, are the custodians of health, and ought, therefore, specially to concern ourselves in the wholesale removal of the preventable cause of so much disease and misery. If an epidemic from some more obscure cause destroyed a tithe of people so systematically and regularly as alcohol does, we should be ambitious to vie with each other in discovering the mode of reaching and removing the root of the evil. It is our duty to do the same thing in regard to this great plague which is always before our eyes. Another point dwelt upon was the recognizable pathology of alcohol, and the lesson it supplies, in respect to the employment of it as a medicinal remedy. Touching this last subject, the speaker repeated his often stated opinion that alcohol, whenever it is prescribed in disease, should be prescribed as "a weapon of precision"—that is to say, diluted with water in measured doses, without the least complication. This plan, he urged, answers perfectly, and after fifteen years' employment of it he had found it equal to every requirement. Finally, the requirement itself was, he thought, in truth, very much curtailed when all the facts of the necessity were fully disclosed. The masters of physic who recognized the force of the *experientia fallax* were most sound when they exposed that kind of experience, and never more was that soundness verified than in the practice of alcohol administration. Let a practitioner, said the speaker, who has been accustomed to use alcohol, once have the courage to look at the other side of the shield, and see what remarkable results follow treatment without it—as, for example, in cases of hæmorrhage, pneumonia and asthenia, and the rapidity with which the mode of treatment without alcohol would advance would lead to quite a revolution in the practice of using alcohol as a remedial instrument. Dr. Ridge, Dr. Norman Kerr and Mr. Moir followed on the same side. The most trenchant opponent was Dr. King, who dwelt more particularly on the social influence of alcohol for good when perfect moderation tempered appetite. He was of opinion that wine, judiciously taken, aided the worker and sustained the enfeebled. Altogether, this new experiment of local discussion on the alcohol topic from its medical aspects, by medical men amongst themselves, was so friendly, hopeful and instructive that we trust it will be repeated. It is good for brethren to dwell together in unity.—Editorial, *Lancet*.

CHOLERA INTELLIGENCE.

According to intelligence up to the end of January last, cholera had undergone a great diminution in Syria, no new cases having been recorded for several weeks in the villayets of Aleppo, Adana, and Damascus. On the other hand it was reported that two cholera deaths had occurred in the villayet of Diarbekir and five in that of Beyrout. The total cholera mortality in Syria up to the week ending January 24, had been 4,170. Of these, the villayet of Aleppo was responsible for 2,361, that of Damascus for 1,189, of Beyrout for 421, of Adana for 97, of Memouret-ul-Aziz for 85, and of Diarbekir for 15. Later intelligence is to the effect that cholera had ceased in Syria by January 22, and we have information from a correspondent who is able to speak with considerable authority, to the effect that so far as the towns, at least, of Beyrout and Damascus are concerned, no new case of cholera has as yet appeared. It may also be added that quarantine restrictions imposed at Constantinople on arrivals from Syrian ports between Alexandretta and Beyrout have been removed, and that the Syrian ports generally are regarded as free from the disease. There is, however, reason to believe that, as regards Tripoli cases are being hushed up, and that the disease has not yet quite ceased there. The serious epidemic in Japan, to which we have from time to time adverted, also seems to have come to an end.—*The Lancet*.

PRACTICAL NOTES.

TÆNIA.

Thomson speaks highly of the following:

℞. Chloroformi, f℥j.
Syrup simp., f℥j. ♏xl. M.

S. Take in three equal doses at 7 A.M., 9 A.M., and 11 A.M. At midday give f℥j of castor oil.

—*Le Courier Médical*, March 15, 1890.

Another combination is:

℞. Flor. Koosso, ℥iis–℥iv.
Ext. filic. mar. æth., f℥iss–℥ij.
Aquæ destillat., f℥iij. M.

S. Take in three portions half hourly.

—*Kinder-Arzt, April, 1890.*

After a light diet the evening before, give the following on an empty stomach:

℞. Ol. tiglii, gtt.j.
Chloroform. purif., f℥j.
Glycerin., f℥j, f℥ij. M.

S. Take in two doses, half an hour apart.

—*Pharmaz. Zeit.* 45, 1890.

SUMMER DIARRHŒA.

The following is recommended:

℞. Resorcin, gr. iss–gr. iij.
Infus. chamomil, f℥ij.
Tr. opii., gtt. ij.
Tr. cascarill., gtt. xv. M.

S. Teaspoonful every two hours.

—*Kinder-Arzt*, April, 1890.

Critzmann employs the following:

℞. Bismuth, salicylat., gr. xv–℥ss.
Tinc. opii., gtt. j–v.
Infus. Theæ., f℥ij.
Syrup rubi, f℥v.
Rum, f℥iv–v. M.

ASTHMA.

℞. Tinct. stramonii, ℥ij.
Tinct. lobeliæ æther., ℥j.
Potass. nit., ℥j.
Sp. æther nit., ℥ss.
Tinct. aurant recent., ℥ss.
Aq. chlorof., ℥vi. M.

S. Take two tablespoonfuls at bedtime, and one tablespoonful if difficulty of breathing comes on.

TREATMENT OF SPASM OF THE GLOTTIS.

Sir Morell Mackenzie, an acknowledged authority in laryngeal cancer, recently imparted to his brethren of the Laryngological and Rhinological Association an item of practical information, which we communicate to our readers in the hope that it may come in handy just when something handy is a desideratum. The successful treatment of that alarming and dangerous condition, spasm of the glottis, is oftentimes difficult and uncertain, but Sir Morell tells us that by setting up a rival reflex, the laryngeal spasm, itself a reflex, usually due to peripheral irritation, may be overcome *instanter*. All one has to do is to get the sufferer to take a pinch of snuff or pepper, or, failing either condiment, to excite sneezing by tickling the mucous membrane of the nares. The immediate result is a paroxysm of sneezing, after which the patient sinks quietly back to sleep, breathing like a newborn infant. The treatment is logical as well as practical, and as it is now made public for the first time, it is well worth a trial.—*Ex.*

ACUTE ECZEMA AND IRRITABLE CONDITIONS OF THE SKIN.

Dr. J. V. Shoemaker (*Times and Register*), advises:

℞. Cocain. hydrochlorat., gr. iij.
Atropinæ sulphat., gr. j.
Morphinæ sulphat., gr. ij.
Unguent. acidi carbolici, ℥j. M.

PIGMENTATION OF PREGNANCY.

℞. Cacao butter, ℥ijss.
Castor oil, ℥ijss.
Zinc oxide, grs. 45.
Oil of rose, q. s.
M. Sig., to be applied morning and evening.

ANÆSTHETIC MIXTURES.

The following formulæ for the preparation of the anæsthetic mixtures, are given in the *Medicinische-chirurgische Rundschau*. The A. C. E. mixture, according to this journal, is made by taking:

℞. Alcohol, 1 part,
Chloroform, 2 parts.
Ether, 3 parts.

Another method of making it is to use:

℞. Alcohol and ether, 1 part.
Chloroform, 3 parts.

With some the anæsthetic mixture is made by adding 4 parts of chloroform to 1 part of alcohol. —*Medical News.*

ARISTOL FOR FISSURED NIPPLES.

Vinay, in *Lyon Médical*, has recommended the employment of aristol in the treatment of fissured nipples occurring during lactation. He uses it in cases in which there is much ulceration and pain. The mixture is as follows:

℞. Aristol, 1 drachm.
Liquid vaseline, 5 drachms.

This is to be applied to the breast and carefully wiped off before the child nurses. After its employment the pain diminishes and cicatrization goes on rapidly. In cases in which the glands become much involved, this preparation of aristol may be rubbed into the enlargements with advantage.—*Medical News.*

SOCIETY PROCEEDINGS.

Gynecological Society of Boston.

217th Regular Meeting.

The Gynecological Society of Boston held its 217th regular meeting at No. 19 Boylston Place, Boston, on Thursday December 11, 1890, at 4 o'clock P.M., with the President, W. SYMINGTON BROWN, M.D., in the chair.

DR. AUGUSTUS P. CLARKE read a paper entitled

THE INFLUENCE OF THE POSITION OF THE PATIENT IN LABOR IN CAUSING UTERINE INERTIA AND PELVIC DISTURBANCES.

(See page 432.)

DR. WM. G. WHEELER said that common custom influences the position of the patient or the time of labor, but each case should be treated according to its own merits. The Irish physicians use the knee elbow position. He prefers the left lateral position but does not feel like recommending any particular position exclusively.

DR. C. E. PRIOR stated that most women select their own position and in his own practice he allows the patient to do so. He doubts whether the long continued position is responsible for the many results alleged. He feels that the sooner the patient is delivered the better, and he would rather use the forceps early than allow troublesome delay. He said the reader did not touch upon the subject of position to rectify presentation. On this subject he is not as enthusiastic as a certain writer whose article appeared about a year ago.

DR. D. WALDO STEARNS said that he had the same opinion as the last speaker and he believes that too long labor is responsible for many evils. The patient should walk about during the first stage in order to keep up the pains which stop if the patient lies down. In the second stage he prefers the left lateral position. If there is inertia he gives 15 grains quinine according to the teachings of Fordyce Barker; this is usually very effective. Friction over the abdomen may also be applied. If there is still no progress he then uses the forceps. The urine should be drawn and the bowels evacuated unless there has been an operation within a short time. He gives an enema in the first stage. He prefers the use of forceps to turning. Can the physician prevent rupture of the perineum? Some authorities say that ten per cent. are unavoidable. He does not have as many cases of rupture as formerly. He forces up the head when necessary. He has recently read an article which advised the occurrence of a rupture if necessary to save the child from too long delay.

DR. BROWN could recall no case he had seen in which the position of the patient made any difference. He prefers the left side. The patient should walk about during the first stage but not enough to get tired. To relieve tiresome aggravating pains he administers an opiate and thinks it preferable. He would not use forceps until absolutely certain that labor would be too long delayed if they were not used. He has seen the perineum torn several times, but believes that it can frequently be saved by the method explained by Dr. Stearns, which he also has used. Changes in position are recommended. He does not like to give much ether and would use it only just as the head is coming out. He fears post-partum hæmorrhage after the use of ether.

DR. WILLIAMS has had the same experience as Dr. Stearns. He thinks the position should be changed. Some of the effects may be due to something of which we do not know. He has used chloral with much benefit.

DR. JEFFERSON has experienced no trouble from any one position long continued, and he fears too speedy delivery more than this.

DR. ELLIOT prefers the left position and he changes if necessary. He remembered one patient who would not lie down, and the head of the child was found to be blocked. He has used chloral and opium, but would rather feed the patient, which he thinks prevents tardy labor. He stretches the perineum and holds back the head and thus rarely gets a rupture. Sometimes gives stimulants.

DR. COOK treats the bowels before labor sets in, but he finds it difficult to get his orders carried out. He prefers the action of chloral to opium. He has seen good results from the use of hot water douches by rectum or vagina. He prefers the position on the left side because manipulation to save the perineum by the fingers in the rectum is easier thus. He would not allow one position too long in the second stage. If the os remains rigid after three or four hours he would not allow labor to go on without treatment.

DR. IRISH said he never saw any mischief arise from the use of one position, yet he feels that too long delay in one position may cause trouble. He would use instruments if after three hours there was no advance and there were sufficient pains. He prefers chloroform to ether. He never had any post-partum hæmorrhage result from the use of anæsthetics. He does not continue the administration until there is complete anæsthesia. He thinks it acts as a stimulant to pains.

DR. WHEELER narrated a case of complication which he had not seen for forty years before. It is unique in his experience. He has seen one case complicated with measles which did well and another with scarlet fever from which the patient died. The peculiar case was one of cerebro-spinal meningitis. The woman was 28 or 30 years old. First labor. She had the disease for twelve hours before labor. Dr. W. saw it with

another physician, who said he had a patient with rheumatism. There were pains in various parts of the body but no labor pains—no increase of temperature—no heat or swelling. The uterus was quiet—eight hours later there was more pain—no vomiting. The os uteri seemed to be a little more patulous and dilatable. Thought the pains to be neuralgic and gave an opiate. Then noticed some spots on the abdomen which did not disappear on pressure. The whole skin was sensitive. He urged dilatation as he felt that something was coming. He ruptured the membranes and the pains subsided. The labor was terminated in about eight hours. When the uterus began to act the other pains ceased for about twenty-four hours, when they came on again and the spots became more pronounced. There was some rigidity of the muscles of the neck. Both typhoid and meningeal disease were thought of. Next day the head drew back and the patient died in seventy-two hours. He had never met with such a case before.

DR. PRIOR stated that he uses the forceps to deliver a difficult case if the head is low down, but he turns it if it is high up.

The President, DR. W. S. BROWN, said that he prefers the position on the left side. He does not allow too long a delay in labor, but advises and uses forceps or some other method of interference.

DR. CLARKE, in closing the discussion, said that he has felt like giving food during labor but he found he had been criticised for such advice. He has had cases of labor which came to a speedy termination after a change of position.

Philadelphia County Medical Society.

Meeting of February 11, 1891.

(Abstracted for THE JOURNAL).

THE TREATMENT OF CORNEAL ULCERS BY THE ACTUAL CAUTERY.

DR. G. E. DESCHWEINITZ, read a paper having the above title. After rehearsing the history of the use of the actual cautery in cases of corneal troubles the writer brought his own cases, in which this method of treatment had been used, together under the following several heads: 1. Small central ulcers in children of bad nutrition, which either through neglect or imperfect treatment have tended to form an abscess. 2. Shallow central ulcers in scrofulous patients, the ulcer having a slightly turbid base, very chronic in its course, and declining to heal under ordinary remedies; in all of the cases of this character there were the appearances of former granular lids, and in one active trachoma. 3. Phlyctenular ulcers, beginning in the form of small pustules at the corneal border, speedily ulcerating and surrounding themselves by a yellow area of infiltration, and with a strong tendency to perforate. 4. Infecting or sloughing ulcers associated with pus in the anterior chamber, or, in other words, hypopyon keratitis. 5. Marginal ring ulcer, or that form which is sometimes seen in purulent ophthalmia, occurring just at the circumference of the cornea, often covered up by the chemotic conjunctiva, and very likely to perforate, because it is hidden by the swollen tissues and not observed. 6. Herpes of the cornea, one being an example of an ulcer associated with herpes zoster ophthalmicus, and the other true herpes of the cornea in which a vesicular eruption occurs, breaks down, and leaves an ulcer; that form which has been seen under the same circumstances, as when herpes occurs around the lips and nose.

In all cases the cautery had only been used after other methods of treatment had been tried, and the author says that he has not one single bad result to record. In three out of thirty cases perforation of the cornea took place, "with evacuation of the aqueous humor, twice as an accident during the application of the cautery, and once when the ulcer had nearly perforated, and Descemet's membrane had bulged forwards, forming its floor, then I deliberately burned through the tissue."

As to the method of application, a small Paquelin thermo-cautery, a galvano caustic loop, or, as in the writer's experience, a platinum probe heated to redness in a Bunsen burner, may be used.

The pupil is atropinized or eserinized—according to the indications present—and a few drops of cocaine are instilled shortly before the operation. The lids are then separated by the operator, and the cautery applied gently to all of the sloughing material. Usually but one application is required, yet subsequent touching may be demanded. The after-treatment does not differ from that given to an ordinary corneal ulcer; and as to the cicatrix, or leucoma, resulting it is no more extensive—the author holding that it is even less so—than happens when healing from other means. There are some contra-indications to this use of the actual cautery, among which are "extensive ulceration, involving a large area of the cornea," and yet in "just such cases very good results have been obtained." It should not be used in an ulcer which has already perforated, and where anterior synechia has occurred. And it does not seem to the writer to be indicated in cases of hypopyon keratitis where "there is a large ulcer associated with a hypopyon that nearly fills the anterior chamber, and in which it can be demonstrated that the collection is exceedingly tenacious, having assumed the character of a slough."

In the discussion which followed, DR. EDWARD

JACKSON said he had but a comparatively small experience in the use of this method. He felt convinced that heat was the only antiseptic which would penetrate as far as the tissue was involved, yet while it does so, and destroys the suppurative process, it also destroys the corneal tissue leading to a corresponding opacity. In his experience scraping of the surface of the ulcer, together with the use of eserine, had been sufficient.

DR. CHARLES H. THOMAS had not used the cautery, having found that a thorough wiping of the ulcers, and touching with the solid stick of nitrate of silver, to have answered very well.

DR. SAMUEL D. RISLEY, also, had not used the cautery, although aware of its merits. He had found other measures to do, excepting in some cases in which failure had been met. In such cases, hereafter, he felt that he would resort to the cautery treatment.

In closing the discussion, DR. DESCHWEINITZ said: "The actual cautery should not be used, as a rule, until the ordinary and milder methods have been employed. If the cautery is applied carefully, and not, as recommended in some text-books, beyond the edge of the ulcer and into the healthy tissue, and only that portion of the structure burnt which would be destroyed by the process of disease, there will be no more opacity of the cornea than if it had not been applied. In certain types of infecting ulcers, with a creeping tendency, it seems to me there should be no delay in the employment of this most potent remedy."

SEVERE PUERPERAL ECLAMPSIA; THE IMMEDIATE INDUCTION OF LABOR; RECOVERY.

A few remarks, together with a very complete history of a case, were offered by DR. WILLIAM H. MORRISON. The medicinal measures, which had been found of value, were rehearsed, and the unsettled etiology of the disease was reviewed. The primary indication in puerperal convulsions happening previous to delivery, viz., the speedy termination of the pregnancy, was emphasized; and meantime the convulsions should be controlled by the use of ether, chloroform, chloral and other similar substances. Also was relief to the kidneys to be afforded by free catharsis and diaphoresis. The writer felt that in the more severe cases, where uterine contractions were tardy, and a rapid termination of the pregnancy, in consequence, impossible, that the question of the removal of the fœtus by abdominal section should be seriously considered. "Such a course would in a few minutes remove an important causative factor in the production of the disease, afford a better opportunity for the action of remedies intended to control the paroxysms, to stimulate the action of the kidneys and to favor the excretion of poisonous matters, and probably give, both to the mother and to the child, the best chance for life."

DR. REYNOLDS WILSON said he simply wished to refer to the use of morphia in the treatment of puerperal convulsions. He had recently seen its clinical use by Professor Winckle, who advocated its administration hypodermically in doses of one-half grain, repeated in from four to seven hours, and continued until three grains in all had been given.

DR. WILLIAM S. STEWART had seen a number of cases of puerperal convulsions, and never found any difficulty in controlling them by the use of chloral, which he found acted decidedly within a specific length of time. "One drachm of chloral injected into the rectum will control the convulsions for about one hour and a half, almost to the minute." It may then be repeated. The effect is profound sleep, and the action of the drug will be manifest, it is stated, in ten seconds.

DR. WILLIAM H. WELCH mentioned a case in which chloral had been freely used, yet the patient was not saved.

DOMESTIC CORRESPONDENCE.

Results with Koch's Remedy.

To the Editor:—I desire to give my results with Dr. Koch's remedy in a short communication. I may say that the same has been used in my private institution for diseases of the lungs and throat since December 23, 1890, in twenty-two cases of pulmonary tuberculosis, some of them having also laryngeal tuberculosis, and in one case of lupus vulgaris of the face. These cases were reported and shown to the Buncombe County Medical Society, March 2.

From the beginning I determined to avoid general reactions, and we kept the temperature records to preserve us from over-dosage rather than to assure us that the patient is showing therapeutic effects in the symptoms produced. I find that local reactions can frequently be observed with the stethoscope by examinations in from two to thirty-six hours after an injection, and that local reactions occur in the larynx and in the lupus case, as well as in the lungs, without material rise of temperature, or the production of general symptoms.

I find further that all the cases which I have selected for the Koch method, in both early and advanced stages, but particularly in the former, show an unmistakable general improvement, consisting in gain of flesh, from three to fifteen pounds (one advanced case gained ten and one-half pounds in three weeks), there is an increase in strength, a better color, less cough and better sleep, the patients are thoroughly conscious of their improvement. Also that in the majority of

cases local changes have occurred in the affected parts, which, without Koch's method, we have always recognized to be for the better. These local changes consist in the disappearance of moist sounds, gurgles, râles and crepitations, and the reappearance in their stead of a better character of respirations; in the larynx of diminution of swellings and infiltrations, cleaning off and granulation of ulcerations; in the lupus case, of progressive healing and repair, and with these improvements we have less cough and expectoration.

In four cases the symptoms have entirely disappeared, and microscopically, the bacilli fail of demonstration, or are comparatively few and gradually diminishing in number where we still get sputum for examination.

In my local examinations I find that all tubercular deposits do not react to the remedy at the same time. Virchow and others have shown anatomically that the very young tubercle, the miliary eruptions, and the old deposits located in fibroid and cicatricial surroundings are frequently unaffected, and I explain these evidences by the vascularity of the tissue surrounding the tubercle, being least, or entirely non-vascular, where we find a given dose of the remedy inoperative. Later local reactions occur in recent deposits to even smaller doses than formerly were borne without local reaction, because by the natural changes these tubercles have undergone in the intervening time, vascular and granulation tissue has been produced, and the tubercle is now accessible. Older deposits react locally only after reaching large doses, because of the slight and feeble circulation through cicatrizing connective tissue, not enough of the remedy could previously reach them to produce an effect. The local reaction of accessible tubercular tissue is in proportion to the dose, and if excessive, causes not only necrosis of the tissue, but so rapidly that I have seen the excavation and an almost entire upper lobe in less than a week, at one of the Hospitals in Berlin. Such rapid processes bring with them the dangers of general infection.

In considering our results, we have of course to remember that some improvements would have occurred, the same as we have witnessed heretofore, due to climatic and other influences, and particularly due to the strict and correct management of cases in a well conducted institution. We had, a year ago at this writing, not a single case in our establishment that was not showing some improvement, but I believe I am not mistaken in my belief that under Koch's method we have had a more uniform and more rapid favorable influence to record than heretofore, and in some cases, so much so that we cannot but attribute it, at least to a considerable degree, to the action of the remedy.

Our dosage begins with half a milligram, and an increase by half milligrams every second or third day, and only then when we are entirely satisfied that to the last two doses no general or local reaction has occurred. Any rise in temperature at all attributable to the remedy is a signal for a delay of an additional day in repeating now a smaller dose. After ten milligrams have been reached we increase by two or two and a half milligrams, and we have now, in some cases, arrived at forty milligrams without ever having disturbed the subjective feelings of the patient, and with the happiest results.

Seeing these results so satisfactory, and knowing that nowhere in this country or in Europe a similar method of administration has been adopted, I believe it my duty to call attention to what I believe to have been a system of over-dosage with production of poisonous and dangerous symptoms in the use of the remedy.

CARL VON RUCK, M.D.

Asheville, N. C., March 3, 1891.

The Philosophy of Consumption.

To the Editor:—A proclamation by an eminent physician that he has discovered a specific cure for consumption in its most prevalent and insiduous form, known as tuberculosis, might well create a deep and universal interest, since there are comparatively few of us that do not have this deadly enemy within the limits of our cousin kinship. And if German slaughter-house statistics are to be taken as representative, no less than ten per cent. of our domesticated-horned cattle, are a prey to the same disease, though seldom discovered during life. This fact would suggest that tubercular consumption is still more prevalent in the human family than has yet been supposed, and that many carry it under the cover of other maladies.

But unfortunately for any hope for a specific remedy, the preponderance of evidence points to the fact that consumption is much more a product of individual habits and social and climatical conditions, than a resultant of any one agency. Indeed, the positive evils may vary not only in their degree, but also in their number and order of action in the period of its evolution.

If it were hereditary in the sense that it is transmitted by the blood, as a specific germ or virus, then the offspring of consumptives would have an attenuated form of the disease which, by reasoning from analogy, ought to secure them exemption from any further danger along that line. Such, however, is not the case. But if we say a special fitness is inherited, then we can understand how the offspring of consumptives are prone to develop it, since they are not only born with hereditary qualifications, but not infrequently they are cradled amidst the very agencies

which fostered the evil in their parents, if indeed, they were not primarily causative.

That the contribution of heredity to consumption is great is undoubtedly the case, and more than any other factor it would seem to have a directing power in the army of inducing evils. But the fact that the greater number of the offspring of consumptives escape the disease, even where the general family resemblance is quite pronounced, is readily explained by the difference in personal habits, the circumstances of different periods or the domestic regulations instituted by medical counsel. Also the fact that consumptives so frequently spring from neurotic parentage and the victims of dissipation, especially alcoholic, still further goes to show that the hereditary element is essentially a reduced power of resistance to formative evils, and that as a negative condition, it may hold the balance of power in focusing the forces. Thus, heredity in disease can be understood as in no sense implying a specific force, but rather, as an atonic or susceptible condition, varying in its precise character and producing a *pars minoris risistentiæ*, or a special weakness in a special way.

That the germ bacillus does not originate consumption, there can be no doubt, unless consumption is not to be regarded as a disease until it is full fledged, for otherwise, the germ would be present in the earlier formations, as well as the later, which, according to good authority, is not the case. But that this parasite has a special affinity for consumptive tissue, there is no question, and that it thrives therein with great rapidity, hastening retrogressive changes, is also to be granted. But as yet, this is all we are entitled to believe.

We thus see that the lines of successful treatment must be both constitutional and local, that the constitutional cannot be specific and the strictly local cannot be curative. The constitutional must be of a negative and positive character, having regard to the support of the healthy remnant, and which will require correction of any deficiency whatsoever in order to remove the morbid constitutional habit. The local will be cleansing of the affected organs from the germs and morbid products.

The evident selective affinity of Koch's lymph for tuberculous tissue may enable it, in certain cases, to effectually seal the arterial capillaries about the affected organs, owing to the intense vaso-motor disturbance produced. This would starve the germs, which with the tubercular matter, may be expectorated through the moisture and motion of the lungs. In incipient cases the tubercles might be as readily absorbed as catgut ligature, and the germs, if any, fall to phagocitic prey. The Koch lymph is evidently not a poison to the germs, and probably has no other action on the affected organs than that of an irritant, having a selective affinity by virtue of the kinship with its contents. This theory of its action is supported by our common knowledge of the power of pyogenic agents to awaken old or slumbering inflammations, and the fact that septic fevers, such as small-pox, have been known to leave the consumptives in the last stages free from every symptom.

J. S. CHRISTIAN, M.D.
348 Washington Boul., Chicago.

Cases of Typhoid Fever in Infants.

To the Editor:—It is commonly thought that typhoid fever is rare in young children. Perhaps this is so, yet so far as I have observed, it is not much of a respecter of persons, for in my experience it has ranged through all ages. The following cases it may be proper to state:

Some years ago my wife took this fever while nursing a child 6 months old. This child became sick with the disease the same day and, though separated from her parent, ran a course *pari passu* with her mother. When one had a good day the other did, and when one had a bad day the other followed suit. It was not till the end of three weeks that there began to be signs of improvement. But both began to improve the same day, and so went on. For two years afterwards both were alike subject to occasional attacks of stomatitis. When nearly 3 years old, the child died of diphtheria. Its mother then took the diphtheria, but had it lightly.

The second case was 9 months old, and was also a nursing child. In this family there were nine children from 14 years down, and all had the fever. The mother also had the fever and was in the family way with her tenth child. I did not discover that she was any the worse for being pregnant, though she was well worn down by care before she took the fever. They all recovered. In due time the mother was confined. The child, however, was smaller than any of the others. I had an interest to know whether this child had the fever *in utero*, and so rendered insusceptible to the fever afterwards; but at the age of 3 years it died of croupous diphtheria, and so closed my interest in the case. The father, who had had the fever in the army, escaped. It was plain that they were all exposed to the same cause—filthy water from a tank filled by wash in which were dead rats.

In another family of six children, they and their mother had the fever, except the youngest, then 1½ year old. It was not nursing.

These examples rather hint that it may not be so much due to difference in constitution of young children that they should be measurably exempt from typhoid, as to their less exposure to the ordinary sources of the cause. As a rule, they

move in narrower spheres than older children, and so are less exposed and less liable to be affected; while, if they are nursing mothers who come down with the fever, they are exposed and take the poison point blank, and do not escape.

Is there any record of the case of an infant who was nursing its mother when she came down with the typhoid fever, that did not also take the disease? If not, this shows the great danger to families, if cows from whom they receive their milk happen to be affected with the fever, examples of which have been reported.

E. CHENERY, M.D.

Boston, Mass.

BOOK REVIEWS.

A TREATISE ON RHEUMATISM AND RHEUMATOID ARTHRITIS. By ARCHIBALD E. GARROD, M.A., M.D. (Oxon.), M.R.C.P., etc. With charts and illustrations. Philadelphia: P. Blakiston, Son & Co. 1890. Chicago: A. C. McClurg & Company. Pp. 342. $6.00.

To the student of medicine—be he either upon the threshold of the great science, or treading faithfully along those sacred grounds which a life time's toil has gained him access—this classical treatise will find a warm interest. And he who has the "love of learning" in his heart will but bewail the interruptions of professional duty which call him away ere "finis" proclaims that all has been said. It is really unfortunate that professional exactions prohibit the resolve—which comes when such a lucid delineation of a disease process so widely observed as rheumatism is placed before us—to closet one's self for a day, or a night, that the mind may arise to a full conception of quite all there is to know upon the subject in hand. Few there are thus blessed. Yet for those who run, the moment's halt they must needs have will find refreshment between the covers of this volume.

Starting out with a clearly written history we have, following a review of the theories heretofore advanced with relation to the pathology of rheumatism, which the author concludes with this statement:

Time alone can show whether or no any of the above-mentioned observers have succeeded in discovering a microörganism which is the actual specific cause of the phenomena of rheumatism. Until then, we can only rely safely upon the results of clinical study, which seem to indicate that, in spite of the difficulties presented by the apparently constitutional nature of the malady, no theory of the pathology of rheumatism which has as yet been advanced makes so good a show of explaining the peculiarities and variations in the prevalence and type of rheumatic attacks, or accounts so satisfactorily for the peculiar distribution of the local lesions of the disease, as does that which attributes them to an infection from without.

Then appear clear, terse chapters upon the etiology of rheumatism, and the association maintained with other bodily affections, going into the subject quite to the uttermost, and yet without that redundancy of expression which so often mars a study of this nature.

The first part of the treatise ends with a résumé of the treatment of rheumatism as it stands to-day, and shows the strong position held by the salicylates.

Part II (Book II) treats of rheumatoid arthritis, and is a comprehensive exposition of the leading thought of the times.

A voluminous bibliography, and a very complete general index, closes the volume.

The reviewer cannot well take leave of this book without also noticing the publisher's work, which is, in few words, much superior to that usually observed.

ASSOCIATION NEWS.

Notice to Secretaries of Sections.

To the undersigned Secretaries of Sections are urgently requested to send the list of Papers to be read before their respective Sections, as soon as completed, in order that there may be no delay in the printing of the Programme of the Meeting.

C. H. A. KLEINSCHMIDT, M.D.,
Local Secretary.

3045 N St., Washington, D. C.

SPECIAL CORRESPONDENCE.

Shall The Journal be Removed to Washington?

THE ACTION OF THE MEDICAL SOCIETY OF THE MISSOURI VALLEY.

The following resolution was unanimously passed by the Medical Society of the Missouri Valley, in session at Omaha, Neb., March 20:

WHEREAS, It having come to the knowledge of this Society that an effort is being made to remove the headquarters of THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION from its present location in Chicago to Washington, D. C.; Therefore, be it

Resolved, That we, the Medical Society of the Missouri Valley, instruct our delegates to the coming meeting of the American Medical Association to use all honorable means to retain the headquarters of said Journal in its present location.

F. S. THOMAS, M.D., Sec.

Council Bluffs, Iowa, March 21, 1891.

To the Editor:—I have been waiting patiently to hear the arguments that our Eastern friends rely on to effect the removal of THE JOURNAL to Washington. I have been impressed with most of them as applying with increased force to Chicago.

Leaving out the question of politics, there appears to be nothing in this agitation. But the fact that the next meeting of the Association will occur in the city that is a candidate for the location of THE JOURNAL renders it

necessary to thoroughly canvass the merits of the case before a vote is taken.

There is always a large attendance of the local members of the profession wherever the meetings are held. Washington, Baltimore, Pittsburgh, Philadelphia, New York and other Eastern and Southern cities will be more largely represented than they would be if the meeting were to be held in some other section of the country. Ought the vote of the members who chance to be present at the Washington meeting to decide this question, instead of a vote of the whole membership?

Should any meeting held in Washington or Chicago settle a dispute between these two cities? Undoubtedly the modesty and sense of fairness of our Washington brethren would forbid their participation in such a scheme.

There are the best of reasons to believe that the removal of THE JOURNAL would deprive it of a large share of those requisites to success that have contributed to make it the peer of any American medical journal.

When the loss of advertising patronage is mentioned, some of the advocates of moving for the sake of a change reply that THE JOURNAL should get along without advertisements. Very well. When Grant proposed to take Richmond did he tell his soldiers that they should get along without biscuit and bacon, or coffee? Have these gentlemen ever tried the novel experiment of publishing a journal without advertisements? Which one is so philanthropic as to give bond to indemnify from the loss?

A good certainty is better than an unreasonable, sentimental uncertainty.

It is not surprising, since THE JOURNAL has passed the experimental stage and is an assured success, that a clever neighbor should covet the promising prodigy, but it is too late, gentlemen, to ignore the labors of those who made it what it is.

Who is there in Washington who would have done better, under the same experimental circumstances, than have Drs. Davis, Hollister and Eggleston in an editorial capacity, and Mr. White in his able and courteous management of the important business and mechanical department of the enterprise?

Can we afford to repudiate those who have built up, and are improving our plant, sacrifice our best-paying advertisers, and move out of this great centre of population, commerce and wealth, with its vast accumulating libraries, universities and nine medical schools, with its army of about 2,000 under-graduate and post-graduate medical students?

Is it expected that the mere fact of publishing THE JOURNAL within the city limits of our Capital, is to exercise great influence over our representatives who go there periodically to make laws? In other words, has it become necessary to have editors and publishers performing the rôle of lobbyists to accomplish the ends of our great Association?

If a change must be had, for the sake of a change, St. Louis would be a better location for THE JOURNAL than Washington.

S. S. BISHOP, M.D.

Chicago, March 14, 1891.

To the Editor:—I have read most of the letters to THE JOURNAL, pro and con, in relation to the moving of the same to Washington, D. C., and I have not seen any opinion, as yet, coming from the profession in the old Granite State. But I am sure, that as I have consulted with my confrères thus far, a united voice will come from her hills and valleys: "Let THE JOURNAL remain where it is, unless you wish to asphyxiate its present life powers!"

My reasons are the following: As far as I can judge, there are three to one of the members of the Association, regardless of location, who are opposed to its removal. It is much better and safer policy to let the majority rule in the make-up of all organized bodies. If for no other reason, organic law will decide: "Let it remain in Chicago."

That city affords the best location for it of any city upon this Continent, at the present time. I spent some four months there during the last season, and I know whereof I write. I took some little pains, while there, to investigate the past and present condition of the city; and I wrote several letters, which were printed in one of our local county papers, in regard to the city's development during the past fifty years. It is the most wonderful city upon this Continent. It puts all other cities in the shade as a business centre, when you combine its commercial and railroad facilities, even New York itself. While the latter city has 25 main lines, Washington has 3, Chicago has 38 through lines, running to all sections of the great West, upon which 1,500 to 2,000 trains run in and out of the city every day. Then its population of 1,200,000 makes it the second city in this Nation in numbers. In every form of mechanical, industrial and mercantile growth it is most wonderful. She to-day possesses 30,000 industrial shops and factories, has an area of almost 400 square miles, and if it increases in population for twenty years to come as it has in the last decade, it will become the Queen City of the World, larger than Ancient Babylon, Modern Paris, or British London.

It is argued that Washington is the best location on account of its superior advantages in medical men and literature, and this will serve to make the personnel of THE JOURNAL of a higher order. But I say Chicago leads all other cities in this country (save New York) in advantages for medical instruction. She has five chartered medical colleges, all in a most healthy and prosperous condition, keeping pace with all the wonderful and amazing developments of the other departments of the city.

I am not aware that our profession has any more lofty mountain peaks in medical erudition, or scholastic qualification, in Washington than in other medical centres.

Another plea for its removal—that because our Association is a National body it ought to be in Washington, as that is the National Capital. This may seem patriotic and theoretical, but who shall say how long Washington may remain the Capital of this Nation? The West is making great strides in population and increase of States, and soon the voice of this Republic may be heard in its vote to change the location of its Capital, and put it in a more central position. The vote of the *people* will rule this country, and that portion east of Washington, D. C., is but a fragment, in point of territory and population, compared with Northwest, West and South of this fast growing Republic.

It is for the very reason that Washington is the Capital, and the great centre of *political demagogueism* and *partisan strife* that *it should be the very last place to select for the home of* THE JOURNAL. It is the medium through which the sentiments of all medical writers are voiced from all sections of the Union, and it should not be placed where there is danger of its becoming colored in the least with *political proclivities*.

Let our noble, and ancient profession, stand upon its own broad, scientific character, and its intrinsic worth, to the best good of humanity. Keep it sacredly free from all foreign influences that can belittle its value in the estimation of the world.

For these reasons, and I could cite more if time and space would permit, I shall vote *not* to change the present *home* of our popular and well managed JOURNAL.

W. B. PORTER, M.D.

Walpole, N. H., March 14, 1891.

To the Editor:—I am opposed to the movement to change the place of publication of our National Journal from Chicago to the City of Washington. I think there is no valid reason for it: THE JOURNAL is ably conducted, centrally located geographically, and a

large business city like Chicago is much more conducive to the support and advancement of a medical journal than *a political rookery* like the city of Washington. I think our western members would have just cause for complaint if it were removed farther East. S. LAUGHTON, M.D.

Bangor, Me., March 15, 1891.

To the Editor:—As several good reasons have been and can easily be advanced why THE JOURNAL should not be removed, and no good reason has yet been given why it should be removed, and since no medical journal has ever yet flourished at the Capital, I cast my vote in favor of THE JOURNAL *remaining at Chicago.*

E. H. M. SELL, M.D.

44 West 49th St., New York, March 17, 1891.

To the Editor:—My best wishes for the continued prosperity of THE JOURNAL. I hope it may long remain in the great City of the Lakes. W. W. REEVES, M.D.,

Supt. State Lunatic Asylum.

Austin, Tex., March 17, 1891.

To the Editor:—I can see no reason why the location of THE JOURNAL should be changed from where it now is and has been so long published, and as I believe, to the best interests of the Medical profession. Chicago is nearer the centre of the United States, and why remove THE JOURNAL? I think it far better for the Medical profession to advocate less change in our associations, rules, and regulations, and stand firmly together as a band of brothers and frown upon all movements to create "isms" and "cisms" that tend to weaken and destroy the old landmarks of the profession. C. R. EARLEY, M.D.

Ridgway, Pa., March 17, 1891.

To the Editor:—I notice one of the reasons given by a subscriber for moving THE JOURNAL to Washington, is, that "We the official representatives of the profession should keep as closely to the Government as possible."

The people is the Government, and as Chicago is the centre of the people let THE JOURNAL remain in Chicago and move the Capital near to THE JOURNAL,—that the centre be less lop-sided. E. F. CLAPP, M.D.

Iowa City, Ia., March 21, 1891.

To the Editor:—Please put me down as in favor of retaining THE JOURNAL at Chicago.

A. B. JUDSON, M.D.

New York City, March 21, 1891.

To the Editor:—It is sound doctrine in medicine, as in other pursuits in life, to let well enough alone. THE JOURNAL has passed its minority, and is now full grown and is second to no journal published. Its financial success has grown with its years and it is now on a sound basis; its editorials are concise and to the point; its selections good and of the latest published. THE JOURNAL is in a healthy condition. It requires no medication or *change of climate*, to sustain its vigor and usefulness.

Let it remain in Chicago. B. L. HOVEY, M.D.

Rochester, N. Y., March 21, 1891.

A REPLY TO DOCTOR COMEGYS' LETTER.

To the Editor:—I see by the last issue of THE JOURNAL, that my erudite friend of Cincinnati, Dr. Cornelius G. Comegys, has evidently made an Herculean effort to convince the members of the American Medical Association, that their journal should be transplanted from Chicago to Washington, D. C. But like many other persons, who have unfortunately got on the wrong side of great National problems, it has required a prolonged and gigantic effort on the part of the doctor, to convince even the most unsophisticated member of our Association that his position was right, or that his arguments were well founded and his logic unassailable.

The doctor seems to have forgotten that when THE JOURNAL was born, some seven years ago, that there was only 1,000 members of the Association, which limited its income to not over $5,000 a year, plus the scanty returns it received from its advertising patronage, which at that time was less than $1,000 a year, thus limiting the entire income (provided every member and patron paid up his subscription and advertisements promptly, which is seldom the case), not to exceed $6,000, whilst the expense of publishing alone, not including any pay for editorial work, was over $8,000 a year or $2,000 in excess of the annual income.

But by being "*so conservative, so determined, to take no risks that involved a prospect of pecuniary embarrassment*" the management has increased the membership of the Association from 1,000 or less to over 5,000 members and subscribers, which guarantees an annual income of at least $25,000 a year besides the annual receipts from its advertising patronage of about $10,000, or a total of about $35,000 a year. The management has bought and paid for their own plant and equipment for publishing, binding and mailing THE JOURNAL, and has done all this within the short space of seven years; and yet by this extreme care of the financial and business interests of THE JOURNAL, which Dr. Comegys condemns, and by which he says it "*has been kept too much in the rear of the line of a contest for the due rank of medicine in communities and in the State;*" yet, notwithstanding all this, it has risen from the cradle of journalism in this short time to a place second to none among the medical journals of the United States and Canada; and publishes more pages of reading matter each issue than any journal in our country, and over 400 more pages annually than any medical journal on the Continent.

From THE JOURNAL and its management proper he next turns his "old smooth bore" on the editorial qualifications of the organ of our Association, and says, "no one doubts the editorial capacity of Dr. N. S. Davis or Dr. Hollister, *but these gentlemen, both are large practitioners,*" and because they are both industrious practical men, who are familiar with the every day work of the profession, and in sympathy with the ups and downs of the daily routine of the physician's life, and from experience know what he needs, he claims they are disqualified to edit a practical journal, for the practical doctors of the United States. Did mortal man ever hear of such an innocuous untenable argument? Does Dr. Comegys flatter himself, for a moment, that there is one out of every ten members of our Association who *would* or *could* be induced to believe that because a doctor is in the actual practice, and really a *practical physician or surgeon*, that he is therefore disqualified for the position of "Supervising Editor" of a practical journal for practical doctors?

Does any person suppose for a moment that if Dr. Comegys was seriously ill, or any member of his family, that he would employ such a physician as he would recommend for "Supervising Editor" of our journal to treat him or his family? "Not by a jug full." He would obtain the very best practical physician or surgeon he could get, because he *was a practical man* and not an unpractical theorist. For the *same reason* the members of our Association want a *practical* physician at the helm of the Editorial Department, as well as a *practical* man at the head of the Business Department of THE JOURNAL, because they *are practical* and *know by experience*, what they are doing and talking about.

Our association has no use for high-flying theorists at the head of the Editorial Department of THE JOURNAL, who would fain weave gauzy editorials out of fine spun theoretical yarn, which to the innocent student, or unso-

phisticated, might appear like a brilliant mental effort, but which to the everyday practical physician would be about as useful as sounding brass or a tinkling cymbal, as compared with food, in a time of famine.

In the preface of the first volume of Prof. Agnew's "Surgery" you will find this eminent surgeon saying: "Most of the pages have been written not in what may be termed moments of leisure, but during the hours of the night—hours stolen from the time usually allotted to the repose of body and mind, and after the daily labors of an exacting public and private practice." This sentence alone explains why the best physicians and surgeons of our country as well as of foreign lands so eagerly sought this most valuable work. Because it was written by a *practical* surgeon and not by a theoretical tyro in the medical profession; and yet in the face of all this our erudite friend would advise changing the practical physician and surgeon we now have for "supervising editor," for one who was *not* in the active practice, and who would "promise and swear" that he would never enter the practice of medicine while he swings the editorial pen of our popular Journal. Now, Doctor, how long would such an editor retain the confidence and respect of the members of our Association? The hollow echo answers: "How long?"

The absurd idea that THE JOURNAL must be moved to Washington to obtain a place in the Cabinet is ridiculous. The farmers were but recently represented in our cabinet, but I have no knowledge that a single one of them left his farm and moved to the miasmatic flats of the Potomac in order to secure this recognition recently granted by the federal government. Then why should we remove our Journal there to obtain the same recognition?

In speaking of the consciousness of Chicago as compared with the perception of Washington we desire to ask the Doctor if *he* was conscious of the fact, that Washington only had *three* railroads, which it is absurd to compare with Chicago with more railroads than any other city in the world? We will ask the Doctor if he is conscious of the fact that notwithstanding the extreme consciousness of Washington, that there is not a journal —either medical, religious, scientific, agricultural or of any other nature—that has prospered or attained a national reputation that was or is edited and published in Washington? Doctor, are you conscious of the fact that there is not a daily paper published at present, or that ever was published in Washington that has, or ever had a real good *local* reputation, saying nothing of a *national* reputation? Are you conscious of the fact, Doctor, that even the *Index Medicus* of which so much has been said, is published in Detroit, and that the *Annals of Surgery* is published in St. Louis, and even the *Therapeutic Gazette*, although edited in "The City of Brotherly Love," is also published in Detroit? But these are *private business* enterprises and are run on *business* principles, yet *they* don't seek the National Capital to insure their success. How strange! How passing strange, that you should insist on THE JOURNAL of our Association to assume business risks which not a prosperous journal of the country will dare to assume.

Again, the Doctor says: "If a general and hearty consent to the removal of THE JOURNAL from Chicago to Washington should have been agreed to, then the *general business management* of the organ, and its *editorial* work will become *most important* subjects of consideration."

Why not tell the truth Doctor, although you should shame the Devil, and say that *already* the editorial and business management, (should THE JOURNAL be removed to Washington) has *been bargained* for, and instead of the horse pulling the cart, in this apparent scramble "for the loaves and fishes" the cart, poor thing, is trying to pull the horse. In fact it really thought at *one time it had* pulled the horse!

Just think of it, a "club building," in the National Capital with its *three* railroads, leading to "our father's house" where we will *all* be at home! (*when we get there*), many of us, however, only once in from one to five years, but for which *we are all expected to pay* our hard earned money just the same; to accommodate the erudite editor *without practice or experience*, who with his friends and followers *are* to *occupy* "our fathers" mansion from day to day, and issue out editorial instructions from week to week to the practical hard working Doctors of our National Association. What a sublime idea! What a brilliant conception!

Nor is this all. The Doctor wants us to raise an extra $10,000 to carry out this pet scheme of removing THE JOURNAL to Washington. Surely he has never suffered, or at least, is not suffering now from a severe attack of conservatism regarding any prospective financial embarrassment of the Association or its Journal. These facts alone are sufficient reasons for keeping THE JOURNAL at Chicago where it has grown from a *dependent* child, to a *strong, robust self-supporting man;* and which never has and does not now seek to incumber the Association with any "Club Houses," or $10,000 loans with which to entertain, and pay for an unpractical "supervising editor," who is expected to live in "our father's house" and fare sumptuously, every day, but who *must not practice any* for fear he loses some of his theoretical brain power, which must be kept in reserve to elevate the editorial standard of THE JOURNAL. Why, Doctor, don't you know that the very moment the American Medical Association decides to hold its annual meetings in any *one* city, I care not whether it be the "Queen City of the West"—Chicago, Washington, or San Francisco, just that moment the Association will commence to lose its membership, and will gradually succumb to the slow but fatal disease of inanition?

The sad fate of the National Board of Health should be a warning for us to steer clear of Washington with both the Association and its journal if we desire them to live out their natural expectancy of life. Are you not conscious of the fact that that august body was not only conceived, but born in the National Capital? Yet it soon came to an untimely end from a severe attack of federal marasmus. The political atmosphere of "our National Capital" soon withered this once promising offspring, which has long since passed the way of all the world. And yet, you would drag our now prosperous journal into these same death-dealing political fumes and hazard its chances for a long life and prosperity by so doing.

How unreasonable, how absurd it is to expect *our* National Journal to obtain a subscription list or an advertising patronage such as the *British Medical Journal* has now, in only seven years, when the latter journal has been thirty-seven years obtaining 15,000 members and subscribers, with an annual income of $130,000, whilst we have only been *seven years* securing one-third the membership and one-fourth of the annual income. At this same rate the American Medical Association will only require *twenty-one years* to obtain a membership of 15,000, and less than *twenty-eight years*, the same annual income the *British Medical Journal* now has! or *sixteen years less* time than it required for the British Medical Association to obtain the same membership, and *nine years* less than it took the *British Medical Journal* to obtain the *same* annual income, and yet *you* have the audacity and gall to stand up before our Association and denounce the management of our Journal and condemn the place of its publication with all these cold facts staring you boldly in the face. Indeed, I am surprised and astounded at you, and the more I think of it the more maniacal it appears, until I am compelled to exclaim with Felix of old: Cornelius, "thou art surely beside thyself!"

R. HARVEY REED, M.D.

Mansfield, O., March 19, 1891.

MISCELLANY.

STATE MEDICAL SOCIETY MEETINGS IN 1891.—We give below a corrected list of State Medical Societies, with the name of the Secretary, and the place and date of meeting:

Ala., T. A. Means, Mongomery; Huntsville, April 14.
Ark., L. P. Gibson, Little Rock; Hot Springs, April 29.
Cal., W. W. Kerr, San Francisco; Sacramento, April 21.
Colo., H. W. McLauthlin, Denver; Denver, June 16.
Conn., N. E. Wordin, Bridgeport; Hartford, May 27.
Del., W. C. Pierce, Wilmington; Rehoboth, June 9.
Fla., J. D. Fernandez, Jacksonville; Pensacola, April 14.
Ga., King P. Moore, Macon, Augusta, April 15.
Ill., D. W. Graham, Chicago; Springfield, May 19.
Ind., E. S. Elder, Indianapolis; Indianapolis, June 10.
Iowa, C. F. Darnall, West Union; Waterloo, April 15.
Kan., W. S. Lindsay, Topeka; Wichita, May 12.
Ky., Steele Bailey, Stanford; Lexington, May 4.
La., P. B. McCutchon, New Orleans; New Orleans, May 13.
Me., C. D. Smith, Portland; Portland, June 9.
Md., G. Lane Taneyhill, Baltimore; Baltimore, April 28.
Mass., F. W. Goss, Boston; Boston, June 9.
Mich., C. W. Hitchcock, Detroit; Saginaw, June 11.
Minn., C. B. Witherle, St. Paul; Minneapolis, June 18.
Miss., W. E. Todd, Jackson; Meridian, April 15.
Mo., J. C. Mulhall, St. Louis; Excelsior Springs, May 12.
Mont., J. W. Gunn, Butte City; Helena, April 24.
Neb., M. L. Hildreth, Lyons; Lincoln, May —.
N. H., G. P. Conn, Concord; Concord, June 15.
N. J., Wm. Pierson, Orange; Long Branch, June 23.
N. Y., E. D. Ferguson, Troy; New York, Oct. 28.
N. C., J. M. Hays, Oxford; Asheville, May 26.
Ohio, G. A. Collamore, Toledo; Put-in-Bay, June 17.
Ore., C. C. Strong, Portland.
Pa., Wm. B. Atkinson, Philadelphia; Reading, June 2.
R. I., W. R. White, Providence; Providence, June 11.
S. C., W. Peyre Porcher, Charleston; Anderson, June 9.
S. Dak., R. C. Warne, Mitchell; Chamberlain, June 10.
Tenn., D. E. Nelson, Chattanooga; Nashville, April 4.
Texas, F. E. Daniel, Austin; Waco, April 28.
Vt., D. C. Hawley, Burlington; Burlington, Oct. 15.
Va., L. B. Edwards, Richmond; Lynchburg, Oct. 27.
Wash., C. L. Flannigan, Olympia; Seattle, May 6.
W. Va., J. L. Fullerton, Charlestown; Fairmont, May 20.
Wis., J. R. McDill, Milwaukee, Madison, June 3.

POLICE SURVEILLANCE OF RAILROAD STREET CROSSINGS.—Anent the fact that in Chicago 105 persons were killed last year at railroad crossings of streets, *The Journal of the National Association of Railway Surgeons* editorially recommends police regulation of such crossings as are the most important, *i. e.*, such as have been found to be particularly hazardous from the activity of human traffic. Shut gates at railway crossings may prevent the passage of vehicles, but they do not stop many people from dodging around them and hurrying across the tracks in front of approaching trains.

STATE REGULATION OF PROFESSIONAL CONDUCT.—An Act has been passed and approved by the legislative authorities of Arkansas entitled: "An Act to Prevent Unprofessional Conduct in the Practice of Medicine." Sec. 9, of this Act reads as follows: "Unprofessional conduct for the purposes of this Act shall be held to be: First, The procuring, or aiding, or abetting in the procuring of criminal abortion. Second, Employing or using what are known as cappers, steerers or drummers, or the subsidizing of hotels or boarding-houses to procure practice. Third, The obtaining of any fee on the assurance that a manifestly incurable disease can be permanently cured. Fourth, The wilfully betraying a professional secret to the detriment of a patron. Fifth, All advertising of medical business in which untruthful and improbable statements are made. Sixth, All advertisement of any medicine or means whereby the monthly periods of women can be regulated or the menses reëstablished. Seventh, Conviction of any offence involving moral turpitude. Eighth, Habitual drunkenness.

A COURSE IN HYGIENE.—A practical course in hygiene will be given this spring at Johns Hopkins University, under the charge of Dr. John S. Billings.

LETTERS RECEIVED.

Allegheny, Pa., Dr. J. S. Phillips.
Ann Arbor, Mich., Dr. W. A. Campbell.
Ansonia, Conn., McArthur Hypophosphite Co.
Artesia, Miss., Dr. N. D. Guerry.
Baltimore, Md.., National Bank of Commerce, Dr. Geo. J. Preston.
Bedford Springs, Mass., N. Y. Pharmaceutical Co.
Boston, Mass., Dr. F. Irwin.
Brainerd, Minn., First National Bank.
Catskill, N. Y., P. C. Lewis.
Chattanooga, Tenn., First National Bank.
Chicago, Ill., Dr. W. F. Coleman, Dr. H. M. Smith, Lord & Thomas.
Cincinnati, O., Dr. Coffman, Ohio Valley National Bank.
Cumberland, Md., Dr F. T. McKaig.
Dallas, Tex., American National Bank.
Denison, Tex., First National Bank.
Detroit, Mich., Geo. M. Savage, Parke, Davis & Co.
Eola, La., Dr. P. B. McCritchon.
Evanston, Ill., The Evanston Bank.
Fort Dodge, Ia., Fort Dodge National Bank,
Fort Madison, Ia., German American Bank.
Fort Worth, Tex., Dr. A. P. Brown.
Grand Rapids, Mich., The U. S. Post Office.
Indianapolis, Ind., Dr. G. C. Fisher, Dr. E. S. Elder.
Joliet, Ill., Nemeck Bros.
Lacey, Ia., Dr. J. W. Green.
Las Animas, Col., Dr. G. E. Brown.
Miamisburg, O., Clark, Forbes & Co.
Milwaukee, Wis., Dr. N. Senn.
Mineral Point, Wis., First National Bank.
Mount Vernon, Mo., Mount Vernon Bank.
Newmarket, Eng., Dr. Geo. O. Mead.
New Orleans, La., Geo. F. Wharton.
New York City, L. H. Crall, J. F. Madden, Dr. P. A. Callan, R. A. Ward.
Philadelphia, Pa., Dr. R. J. Dunglison, Dr. A. L. Hummel, University of Pennsylvania Press, J. B. Lippincott Co., Dr. J. W. Holland, Dr. W. B. Atkinson.
Princeton, Ind., Dr. S. E. Munford.
Ravenna, O., O. D. Haven.
Red Jacket, Mich., First National Bank of Calumet.
St. Louis, Mo., Dios Chemical Co., A. M. Leslie Surgical Instrument Co., Battle & Co.
San Antonio, Texas, Texas National Bank.
San Francisco, Cal., J. N. Patton.
Southmayd, Texas, Dr. G. V. Hale.
Stockton, Cal., First National Bank.
Walpole, N. H., Dr. W. B. Porter.
Waterloo, Ia., Dr. D. W. Crouse.
Wessington, Dak., Dr. J. Chancellor Gilbert.
Wilkesbarre, Pa., Dr. Maris Gibson.
Winslow, Ill., Dr. J. B. Goddard.
Yonkers, N. Y., Dr. Jas. A. Steuart, Dr. E. Schopen.
Youngstown, O., Dr. M. S. Clark.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, from March 14, 1891, to March 20, 1891.

Capt. William C. Shannon, Asst. Surgeon, now on duty at Ft. Apache, Ariz., will repair to this city and report in person to the Adjutant General of the Army for further orders. By direction of the Acting Secretary of War. Par. 5, S. O. 55, A. G. O., Washington, March 11, 1891.

Capt. Henry P. Birmingham, Asst. Surgeon, is granted leave of absence for one month, with permission to apply for an extension of one month, to take effect upon arrival at Boise Bks. of First Lieut. Robert R. Ball, Asst. Surgeon U. S. A. Par. 2, S. O. 39, Dept. of the Columbia, March 13, 1891.

Official List of Changes in the Medical Corps of the U. S. Navy, for the Week Ending March 21, 1891.

Medical Director C. J. Cleborne, detached from Naval Hospital, Norfolk, Va., and to Naval Hospital, Chelsea, Mass.

Medical Inspector T. N. Penrose, ordered in charge of Naval Hospital, Norfolk.

P. A. Surgeon John M. Steele, detached from Coast Survey Str. "Bache," and granted three months' leave of absence.

Surgeon James H. Gaines, placed on Retired List, March 18, 1891.

Surgeon M. L. Ruth, granted a month's leave from April 2 next, with permission to leave the United States.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine-Hospital Service, for the Two Weeks Ending March 14, 1891.

Surgeon W. H. Long, granted leave of absence for seven days. March 13, 1891,

Surgeon H. W. Austin, to proceed to Baltimore, Md., for special duty. March 14. 1891.

Surgeon John Godfrey, detailed as chairman of Board for physical examinaton of officer of Revenue Marine Service. March 4, 1891.

P. A. Surgeon C. E. Banks, to proceed to Boston, Mass., on special duty. March 7, 1891.

Asst. Surgeon T. B. Perry, leave of absence extended thirty days. March 13, 1891.

Asst. Surgeon E. R. Houghton, detailed as recorder of Board for physical examination of officers of Revenue Marine Service. March 4, 1891.